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SEPTEMBER 1976

FEED Situation

ECONOMIC RESEARCH SERVICE

U. S. DEPARTMENT OF AGRICULTURE

TABLE 1.--CORN: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1971-76 (ADJUSTED FOR JULY 1 TO JUNE 1 SHIFT IN GRAIN STOCKS REPORTING)

YEAR BEGINNING OCT. 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS SEPT. 30		
					DOMESTIC USE							
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	PRIVATELY HELD	GOVT. 1/	TOTAL
	MILLION BUSHELS											
1971/72	667	5,641	1	6,309	3,997	390	4,387	796	5,183	408	718	1,126
1972/73	1,126	5,573	1	6,700	4,304	429	4,733	1,258	5,991	537	172	709
1973/74	709	5,647	1	6,357	4,183	448	4,631	1,243	5,874	475	8	483
1974/75 2/	483	4,664	2	5,149	3,191	450	3,641	1,149	4,790	359	0	359
1975/76 2/	359	5,767	2	6,128	3,650	465	4,115	1,700	5,815	313	0	313
1976/77 *	313	6,187	1	6,501	3,900 (+,-200)	485	4,385 (+,-200)	1,550 (+,-150)	5,935 (+,-300)	566	0	566 (+,-300)

YEAR BEGINNING OCT. 1	ACREAGE				YIELD	SEASONAL PRICES				GOVT. PRICE SUPPORT OPERATIONS		
							CHICAGO	OMAHA	GULF PORTS			
	BASE OR ALLOTMENT	SET-ASIDE	PLANTED	HARVESTED FOR GRAIN	PER HARVESTED ACRE	RECEIVED BY FARMERS 3/	NO. 2 YELLOW	NO. 2 YELLOW	NO. 2 YELLOW	NATIONAL AVG. LOAN RATE	SUPPORT PAYMENT 4/	TOTAL PAYMENTS TO PARTICIPANTS
	MILLION ACRES				BUSHELS	DOLLARS PER BUSHEL						MILLION DOLLARS
1971/72	90.2	14.1	74.1	64.0	88.1	1.08	1.23	1.23	1.34	1.05	.16	893
1972/73	88.1	24.4	67.0	57.4	97.1	1.57	1.91	1.80	2.17	1.05	0	1,469
1973/74	88.7	6.0	71.9	61.9	91.2	2.55	2.95	2.79	3.11	1.05	0	910
1974/75 2/	5/	0	77.8	65.4	71.4	3.03	3.12	3.05	3.26	1.10	0	244 7/
1975/76 2/	5/	0	77.9	66.9	86.2	2.55	2.75 6/	2.67 6/	2.91 6/	1.10		90 7/
1976/77 *	5/	0	84.1	72.2	85.7					1.25		

1/ UNDER LOAN TO OR OWNED BY CCC; INCLUDES CCC'S UNCOMMITTED INVENTORY IN 1971 AND 1972; TOTAL INVENTORY IN 1973 TO DATE. 2/ PRELIMINARY. 3/ EXCLUDES SUPPORT PAYMENT. 4/ AVERAGE EARNED ON TOTAL CORN PRODUCED. 5/ AVAILABLE FOR TOTAL FEED GRAINS ONLY. 6/ OCTOBER-AUGUST 1975/76 AVERAGE. 7/ DISASTER PAYMENTS. * ESTIMATE.

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The *Feed Situation* is published in February, May, September and November.

SUMMARY

Drought in some areas in July took a toll on U.S. corn crop prospects and reduced the August 1 estimate of the crop to about 6.2 billion bushels, down 6 percent from July 1. Such a crop would still be 7 percent more than the record harvest last year. Changes in production estimates between August 1 and the final estimate have averaged 274 million bushels during the past 10 years, ranging from 14 to 625 million bushels. During this 10-year period, the August 1 forecast has been above the final estimate 5 times by an average of 209 million bushels and below 5 times by an average of 339 million.

However, barley and oats fared better in July with somewhat larger crops expected than the month before. The estimated oat crop is down 16 percent from last year and barley is off 11 percent. However, the orghum crop is 4 percent above last year. The August 1 indications point to 1976 production of the four feed grains around 212 million short tons, 5 percent more than in 1975 and 2 percent more than the previous record in 1971. With little change in carryover stocks, the 1976/77 feed supply is estimated at 229 million short tons, only 4 percent more than the 1975/76 supply.

More grain is expected to be fed in the United States in 1976/77, largely because of moderate expansion in cattle feeding and a further increase in hog and broiler production, but the increase will be less than in 1975/76. Domestic feeding in 1976/77 may run 5 to 6 percent above the 130 million tons in 1975/76. On the other hand, feed grain exports in 1976/77 may run about a tenth below the record large 55 million short tons estimated for 1975/76 because of the Soviet Union's better crops and smaller prospective purchases. Larger purchases by drought-stricken European countries may be partly offsetting.

Combined domestic use and exports in 1976/77 may run smaller than the 1976 harvest if crops are as large as now anticipated. In that case, there is likely to be some modest increase in 1976/77 carryver stocks from the 17 million tons estimated for the end of 1975/76. There is, or course, still uncertainty about the prospective harvest and utilization and as a result, the carryover may fall within a fairly wide range. However, some increase in carryover stocks would suggest that corn prices in the coming year may average a little below the $2.55 per bushel at the farm estimated for 1975/76.

Domestic use of soybean meal in 1976/77 is projected to register a sizable decline from this year's phenomenal disappearance of 15.5 million short tons. The smaller bean crop together with higher meal prices in relation to grain and a prospective 30-percent increase in cottonseed supplies will likely be the major factors contributing to reduced use of soy meal.

The 1976/77 hay supply in relation to roughage consuming animals was about the same as last year. But conditions varied considerably around the country. upplies are generally short in major dairy areas and point to the need to feed more silage and concentrates. Supplies also are short in some beef areas and may lead to unusually large marketings of feeder calves and continued culling of breeding herds this fall.

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FEED SITUATION

PROSPECTS FOR 1976/77

TOTAL FEED GRAINS

Record 1976 Feed Grain Production Indicated

August 1 indications for 1976 production of the four major feed grains (corn, sorghum, oats, barley) were for 212 million shorttons, 5 percent more than in 1975 and 4 percent more than the previous record output in 1973.

The increase in total feed grain production and supply is due mainly to a prospective record corn crop of 6.2 billion bushels, 7 percent more than the record harvest last year. The indicated 1976 sorghum crop at about 790 million bushels is up by 4 percent. But both the oat and barley crops are expected to be substantially smaller.

Harvests of this size would provide a feed grain supply of about 229 million short tons, 4 percent more than the 1975/76 supply of 220 million tons. This supply would be more than adequate to cover domestic use, projected to range fromthe same as in 1975/76 to 10 percent larger, and exports, which may range from about the same as the record large exports in 1975/76 to around 18 percent below. Feed grain use at these levels would leave carryover stocks next year a little higher than last year's and the expected 1975/76 carryover of 7 million tons, with the range of possibilities running from a little less to nearly double that figure.

A large wheat supply, coupled with early season prospects of weaker export demand, have contributed to wheat prices declining to near or below those of feed grains in the winter wheat producing areas that are deficit in feed grains. Thus, wheat feeding is expected to be the largest in several years and wil likely displace some feed grains in rations.

Domestic Use May Rise Modestly; Exports May Decline

Domestic disappearance of feed grains in 1976/77 hinges on how many cattle are placed on feed and how long they are fed, as well as how the current expansion phase in pork production performs. The amount of livestock feeding and red meat production will have a bearing on prices of poultry products which, in turn, affect feed used by poultry. On balance, it appears that the expansion in feed use in 1976/77 will be around 5 to 6 percent, substantially less than the 12-percent increase forecast for 1975/76.

The cattle inventory on July 1 was smaller than a year earlier and points to reduced beef production capacity in the next several years. But the number of cattle and calves on hand that could be placed on feed during the rest of 1976 and in early 1977 is still large. Also, shortages of hay and forage in some areas may force large marketings of such cattle directly to slaughter or into feedlots this fall. Here lies the major question concerning feeding in 1976/77. How many will be placed on feed and how many will go directly, or with minimal feeding, to slaughter? Cattle feeders have generally been in a loss position since late 1975. Even so, placements on feed through the first half of the year were substantially larger than a year earlier. But the rate of increase has slowed sharply recently as fed cattle prices deteriorated and feed prices strengthened. Lower feed prices and higher fed cattle prices this fall should encourage feeders to place cattle.

The upturn in farrowings last winter has begun to show up in larger pork production, and lower hog prices in July and August. Hog inventories by weight groups on June 1 suggest that hog slaughter in July-December may be around 15 percent larger than a year earlier. This points to heavy feed grain use for pork production early in the 1976/77 marketing year.

If intentions to increase the fall (June-November) pig crop 18 percent are carried out, hog feeding would increase in the first half of 1977. But feeding margins have narrowed, especially for farmers who purchased feeder pigs, so some hog producers may back off from earlier intentions.

Broiler production likely will continue above a year earlier until next spring, but gains will likely moderate then, and output during the summer may run a little smaller than in July-September 1976. Turkey production is expected to continue well above a year ago until the end of 1976, and then drop back moderately from year-earlier levels during the first half of 1977.

Feed grain exports in 1976/77 may range from about the same as the expected record high of 55 million tons in 1975/76, to around 18 percent below. The outlook for USSR crops is vastly improved from last year, which points to a reduction in Soviet purchases of U.S. grains. But this may be largely offset with larger purchases by European countries. Both Western and Eastern Europe have suffered from prolonged drought and will import more grain from the United States. See below for a fuller discussion on the world situation and outlook.

Larger U.S. feed grain supplies and some increase expected in carryover stocks indicate that 1976/77 feed grain prices likely will average somewhat lower than in 1975/76. Corn prices at the farm in the coming year may average below the $2.55 per bushel estimated for 1975/76.

WORLD FEED GRAIN SITUATION AND OUTLOOK [1]

World Coarse Grain Production May Be A Record

World 1976 coarse grain production is projected at a record 680 million metric tons, up 3 percent over the previous record outturn in 1973 and 8 percent above last year's harvest. The adverse effects of a spring and summer drought in Europe have been offset by substantial increases in U.S., Canadian, and Soviet production. Both West and East Europe have suffered prolonged drought and their livestock industries are hard pressed by feed grain and forage crop losses.

West Europe's 1976 coarse grain production is projected at 74 million tons, down 9 percent from last year's poor outturn and far below expectations last spring. The region's total grain output is projected at 125 million tons, 4 percent less than last year's poor harvest.

France, which produces around a fourth of West Europe's total grain crop, has been affected most adversely. Total 1976 grain outturn is now projected down 14 percent from last year, accounting for most of West Europe's loss.

East Europe's 1976 coarse grain production is projected to be down around 5 percent from last year's 60 million metric tons. The drought which hit East Germany, Hungary, Czechoslovakia, and Poland has cut about 3 million tons off the crop expected earlier.

The USSR's 1976 coarse grain production is projected at about 100 million tons, more than half again as much as the poor 1975 crop. The increase is attributed to favorable weather conditions.

The Soviet livestock and poultry sector is expanding after a drastic cutback in 1975/76. However, except for cattle, the numbers on feed are still well below year-earlier levels. Livestock inventories on collective and State farms as of June 1, 1976 showed only a 1-percent gain from a year earlier in cattle numbers, hog numbers were off 17 percent, poultry numbers were 13 percent less, and sheep and goats were down 5 percent.

The PRC's 1976 coarse grain production may not reach 1975's record 62-million-ton harvest. Some weather difficulties during the spring of 1976 reduced early grain harvest prospects. The recent earthquakes are not xpected to materially affect grain production.

Canada's 1976 coarse grain crop is projected at 20 million tons, up a little from last year's production. Plantings are estimated at 9.1 million hectares, up about 7 percent from 1975, but yield is expected to decline about 5 percent.

Canada's Wheat Board began on August 1 to offer western grains for domestic use at prices based on U.S. corn at Montreal. This coincided with the elimination of long standing feed-freight assistance to most points between Thunder Bay and Montreal, with lesser reductions in central Quebec and British Columbia. Eastern Quebec and the Atlantic provinces will continue to receive freight assistance. The objectives of this new pricing system are to: (1) allow lower prices to be offered at Thunder Bay, (2) permit more competitive livestock feeding in western Canada; and (3) cause the private feed grain trade to compete with the Wheat Board's new lower prices.

The Southern Hemisphere's 1976 coarse grain production (Australia, Argentina, Brazil, and South Africa) is projected at 50 million tons, up 13 percent over 1975. However, most of these crops will not be harvested until next winter and spring, so prevailing weather until then will determine final crop prospects. Australia and Argentina have already encountered dry weather this season. However, in Argentina light rains fell over much of the grain belt in July and early August, allowing small grain seeding to resume. But the southern half of the Australian grain belt was dry through July.

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[1] Based primarily on FAS, *World Grain Situation: Outlook for 1976/77*, FG-17, Aug. 3, 1976, and FAS, *European Grain Crop Survey Indicate Further Reduction of Crop Forecasts and Increased Imports*, FG-15-76, July 26, 1976. Data in metric tons.

World Feed Grain Trade May be Less in 1976/77

World 1976/77 (July-June) feed grain exports are projected at 69 million tons, down 8 percent from 1975/76. Among the principal exporters, the United States, Canada, Argentina, South Africa, and Thailand are expected to export less while Australia and Brazil may export more.

On the import side—the USSR will not import as much grain in 1975/76 due to their larger prospective harvest. But West European imports of feed grains during the 1976/77 season are expected to increase around 6 million tons above the 1975/76 level.

Japan's imports of feed grains for 1976/77 (July-June) are projected at 14 million tons, up 5 percent over last year. The United States will probably supply around 8 million ton of Japan's feed grain imports for 1976/77. The U.S. share this year may be larger because South Africa's corn and Argentina's sorghum crops are smaller this year. The Japanese mixed feed industry production for 1976/77 (April-March) is estimated at 17.7 million tons, up 3 percent from 1975/76 due to expansion in broilers, hogs, and beef cattle.

CORN

Prospects for Record Crop, Near Record Supply

The 1976 corn crop was forecast at 6.2 billion bushels on August 1, or 7 percent above the 1975 crop. This would break the 6-billion-bushel barrier for the first time. The estimate assumes "normal" weather for the remainder of the growing season and at harvesttime. Production prospects for the remainder of the season are still touch and go, since many areas of the Corn Belt are short of soil moisture. During the past 10 years, the August 1 forecast has been above the final estimate 5 times by an average of 209 million bushels and below 5 times by an average of 339 million.

The crop is slightly behind last year's development but well ahead of normal. Consequently, the crop is less vulnerable to early killing frosts like those experienced in 1974. In addition, new crop supplies may be available earlier than usual which would ease tight supplies.

July is a critical month for corn yields because a large portion of the crop is tasseling and silking (pollinating). At that time, stress from lack of moisture and high temperatures results in fewer kernels per ear. During ear filling, which usually begins in late July and carries into September, the plant is less sensitive to weather than at pollination time. However, weather stress in August tends to hasten maturity by shortening the filling period.

The August 1 corn yield was estimated at 86 bushels, about the same as last year. Yields in the Eastern North Central States (Illinois, Indiana, Ohio, Michigan, and Wisconsin) were forecast to average 98 bushels per acre compared with 102 bushels last year. In the Western North Central States (Iowa, Nebraska, Missouri, Kansas, Minnesota, South and North Dakota), yields were estimated to average 79 bushels per acre, only 1 bushel more than in 1975 when dry weather also hampered crop development.

Nationally, corn acreage to be harvested for grain is up 5 million acres from 1975. This increase accounts for all the gain in production. With the corn carryover this fall estimated at only around 300 million bushels, the 1976/77 market supply would total about 6.5 billion bushels, 6 percent above 1975/76 but 3 percent under the record supply in 1972/73.

Feed Use Hinges on Tricky Questions for Cattle Feeders

As noted on page 5, a key question for feed use is whether cattlemen will follow the normal seasonal pattern of heavy placements this fall when calves come off pasture.

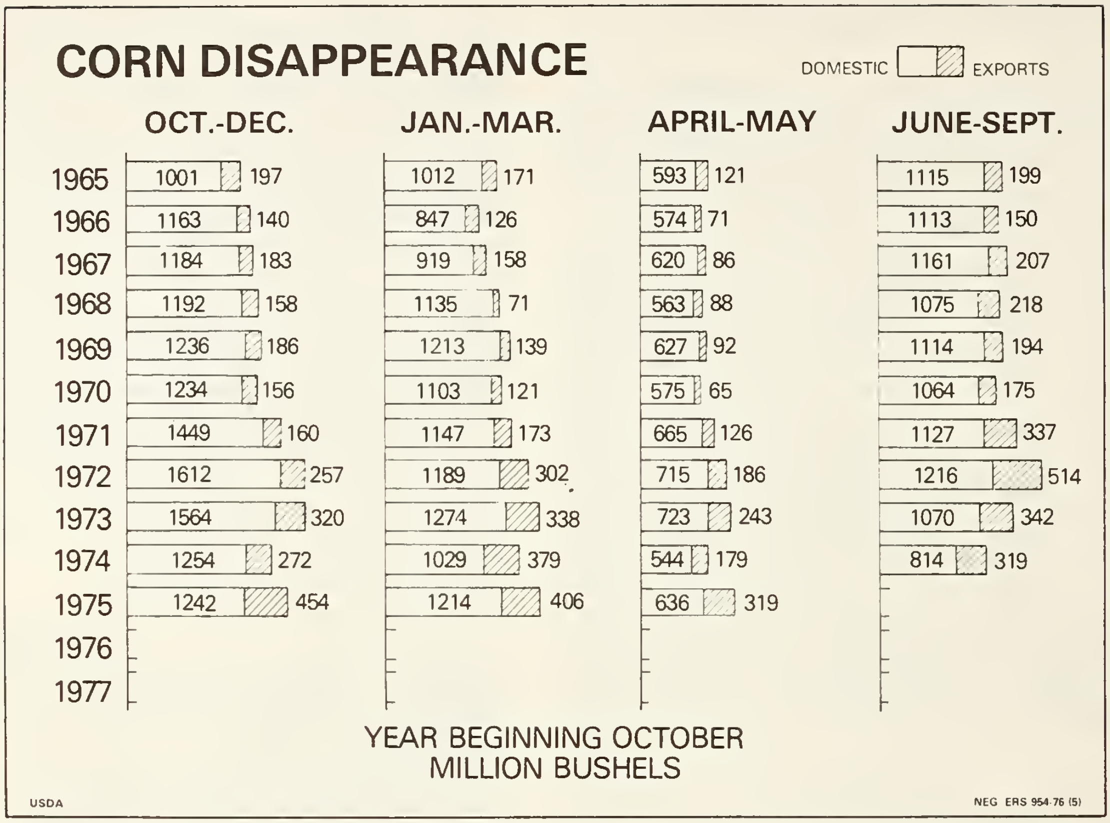
The reduction in the August corn crop forecast from July implies stronger prices than earlier anticipated. Thus, the mood of the feeding industry may be one of "wait and see."

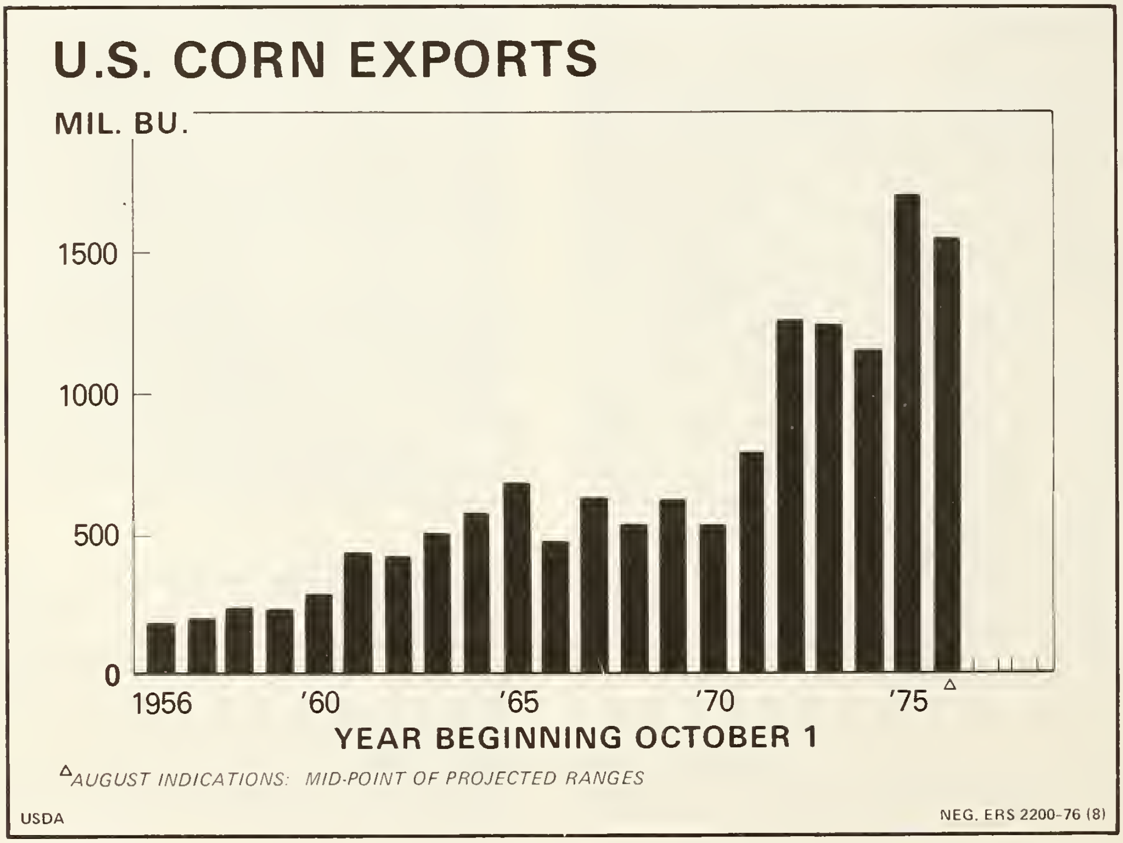
The expansion in hog production discussed on page 5 will support feed demand well into the 1976/77 season. However, hog producers have seen their markets drop $8 or $9 per cwt. since early July. Profits from farrow to finish type operations have remained fairly good but many farmers who buy feeder pigs have probably been in a cost-price squeeze in recent months.

Corn feeding in 1976/77 is projected to range from about the same to as much as 7 percent above this year's expected volume of 3.65 billion bushels. If corn prices in late summer and fall should drop more than usual, feeding use could be near the upper end of the range. But should corn prices this fall be near July and early August levels, feeding use in 1976/77 may turn out near the low end of the range.

Export Demand Down in 1976/77 But Still Strong

U.S. corn exports in 1976/77 are projected to range between 1.4-1.7 billion bushels. While the large Soviet purchases of last year are not likely to be repeated, record U.S. corn shipments to drought-plagued Western and Eastern Europe are expected. Corn exports to all destinations during 1976/77 are certain to be the second best export season and





△*AUGUST INDICATIONS: MID-POINT OF PROJECTED RANGES* could possibly match the current season record flow of 1.7 billion bushels. For a discussion on the world grain situation, see page 6.

Prices May Average Lower This Fall

Projected requirements for corn in 1976/77 are below the August 1 crop forecast, suggesting some recovery in carryover stocks on October 1, 1977. While a carryover within this range could possibly more than double the low 1974/75 and 1975/76 carryovers. This would still be less than the very large carryovers in the 1960's, which generally were around a billion bushels. Annual total requirements since the 1960's have increased 1½ to 2 billion bushels, so even if the prospective carryover should double, the supply-demand balance would still be fairly close. Consequently, prices in 1976/77 could be very sensitive to market developments.

If crop prospects don't deteriorate and demand stays on course, corn prices at harvesttime probably will drop a bit more than the normal seasonal drop of about 10 to 15 percent from the summer peak to the harvesttime low in November. The size of the drop this year will be influenced largely by the size of the crop and prospective demand during October-December. Last year Chicago yellow corn (No. 2) dropped from $3.12 a bushel in August to $2.46 in December. If harvests, both domestic and worldwide, develop close to present indications, corn prices may run a little below last fall's prices.

Normally, when two back-to-back large crops follow a small one, prices would be expected to rise seasonally from harvest lows. But if livestock and poultry margins are low and feeders apply brakes to production, then price movements may reverse. In 1974/75 when livestock and poultry producers, faced with an extremely poor profit situation, cut their feeding operations drastically prices weakened as domestic demand for feed fell off.

SORGHUM

Bigger Crop Forecast

This year's sorghum harvest was forecast at about 790 million bushels on August 1, up 4 percent from last year. The U.S. average sorghum yield of 53 bushels per acre was 4 bushels more than last year. Weather for sorghum production has been generally good. About the only problem was in south Texas where persistent rains delayed harvest, reduced yields, and lowered quality due to sprouting. Sorghum produced in south Texas generally goes for export. Elsewhere, weather has been favorable for both yields and quality, although dry weather in August has placed stress on the Kansas and Nebraska crops. With carryover of old crop forecast at 62 million bushels, the prospective sorghum supply for 1976/77 totals 850 million bushels, 7 percent above 1975/76.

Domestic Demand Influenced by Cattle

About half the sorghum fed is consumed by beef cattle. Consequently, domestic sorghum demand swings with the cattle feeding industry. Sorghum feeding in 1976/77 is projected to range from 5 to 15 percent over 1975/76. But cattlemen's decisions to feed will influence sorghum demand during the next several months. As discussed on page 5, conditions for cattle feeding have not been favorable and July cattle placements in Arizona, California, and Texas were down sharply, suggesting some slowdown in feed demand.

Cattle on feed in selected Western States

State	July 1, 1976	Change from July 1—	
		1975	1974
	1,000 head	*Percent*	*Percent*
California	792	+6	-18
Arizona	312	-18	-35
New Mexico	152	+27	-20
Texas	1,570	+24	-12
Oklahoma	297	+59	+29
Kansas	1,190	+24	+45
Nebraska	1,170	+23	+4
Colorado	810	+18	+21
Total or average ..	6,293	+19	+1

Exports May Hold At Recent Levels

U.S. sorghum exports in 1976/77 are projected to range between 175 and 225 million bushels, compared with roughly 225 million exported in each of the past 3 years. Exports to India may be down, because of its large grain crop in 1975/76, and to the EC, where its variable levy system is less favorable for sorghum imports than in 1975/76. On the other hand, exports to Japan, the major U.S. market, are apt to increase.

With larger supplies of corn and wheat in 1976/77 and early season demand prospects slowing, sorghum prices could drift lower at harvest this fall as uncertainties diminish regarding the domestic or world grain crops. August prices of sorghum at Kansas City were running $4.20-$4.40 per cwt., down from the peak of $5.00 reached in mid-July. If fed cattle markets strengthen in 1977 as expected, sorghum prices should show at least some strength during the last half of the marketing year.

U.S. sorghum exports by country of destination

Country	October-September		October-July
	1973/74	1974/75	1975/76
	Million bushel	*Million bushel*	*Million bushel*
Japan	117.7	76.8	77.9
Israel	23.1	24.0	20.4
Venezuela	16.4	19.5	13.4
Mexico	10.6	27.5	1.6
Netherlands	22.3	16.1	10.5
India	12.1	3.5	19.6
Other	31.9	44.6	38.7
Total	234.1	212.0	182.1

OATS

Poor Crop Leads to Tight Supply

Part of the 1976 oat crop has been hit by dry weather which reduced stands and caused heading on unusually short stalks. The crop, forecast at 549 million bushels on August 1, was 16 percent less than last year's production and the smallest since 1934.

Yield prospects were poor in Minnesota, South Dakota, and Wisconsin. These three States usually account for over two-fifths of total U.S. oat production. However, on the brighter side, Iowa and North Dakota have large crops with yield prospects good to excellent. The average U.S. oat yield is estimated at 43 bushels per acre, compared to 48 bushels in 1975.

Adding the June 1 carryover to production provides about 755 million bushels for the market in 1976/77, about 14 percent less than a year earlier. This is a continuation of the downtrend of recent years.

Smaller Supply and Higher Prices To Reduce Use in 1976/77

In each of the past 4 years total use of oats has either exceeded or matched production. However, like production, total use over the past several years continues to decline consistently. The 1976/77 marketing season probably will be no exception. The tighter supply and relatively higher prices likely will again contribute to weaker feed demand as feed ingredient buyers shop for the best buys. Oat demand by the pleasure horse industry will continue strong, while most of the decline in use will come from cattle feeders.

The small supply should not affect industries that process oats into food products such as breakfast cereal and flour. The poor outturn in the Northern Plains has caused these industries to go outside their traditional supply areas to meet their needs.

Exports of U.S. oats likely will continue near last year's small volume of 14 million bushels if other grains continue priced lower relative to oats.

U.S. oat exports by country of destination

Country	June-May		
	1973/74	1974/75	1975/76
	Million bushel	*Million bushel*	*Million bushel*
USSR	---	(1)	4.5
Germany, West	24.6	2.2	1.7
Japan	1.7	0.4	0.1
Italy	4.6	---	2.1
Poland	5.7	2.5	---
Netherlands	3.0	0.5	0.2
Switzerland	2.7	1.1	0.7
Unidentified	8.3	6.5	1.1
Other	4.5	3.7	2.5
Total	55.1	16.9	12.9

[1] Less than 500,000 bu.

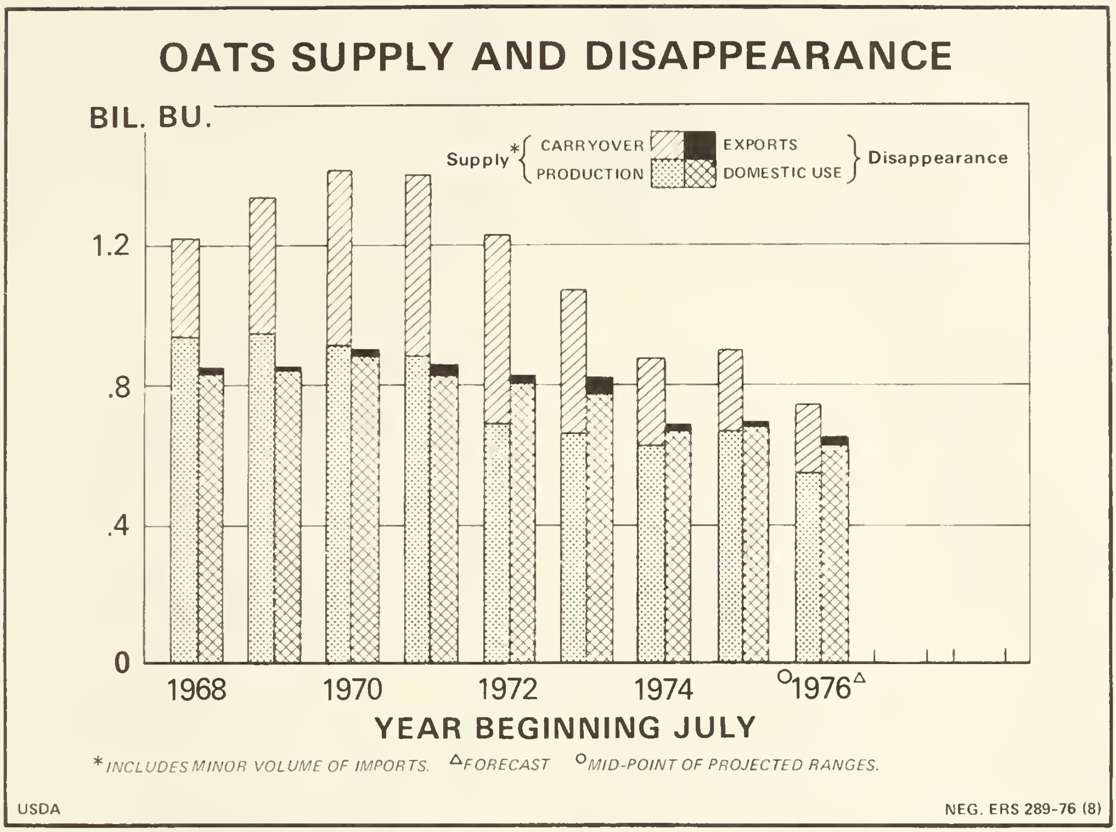
Current Prices High Relative to Other Grains

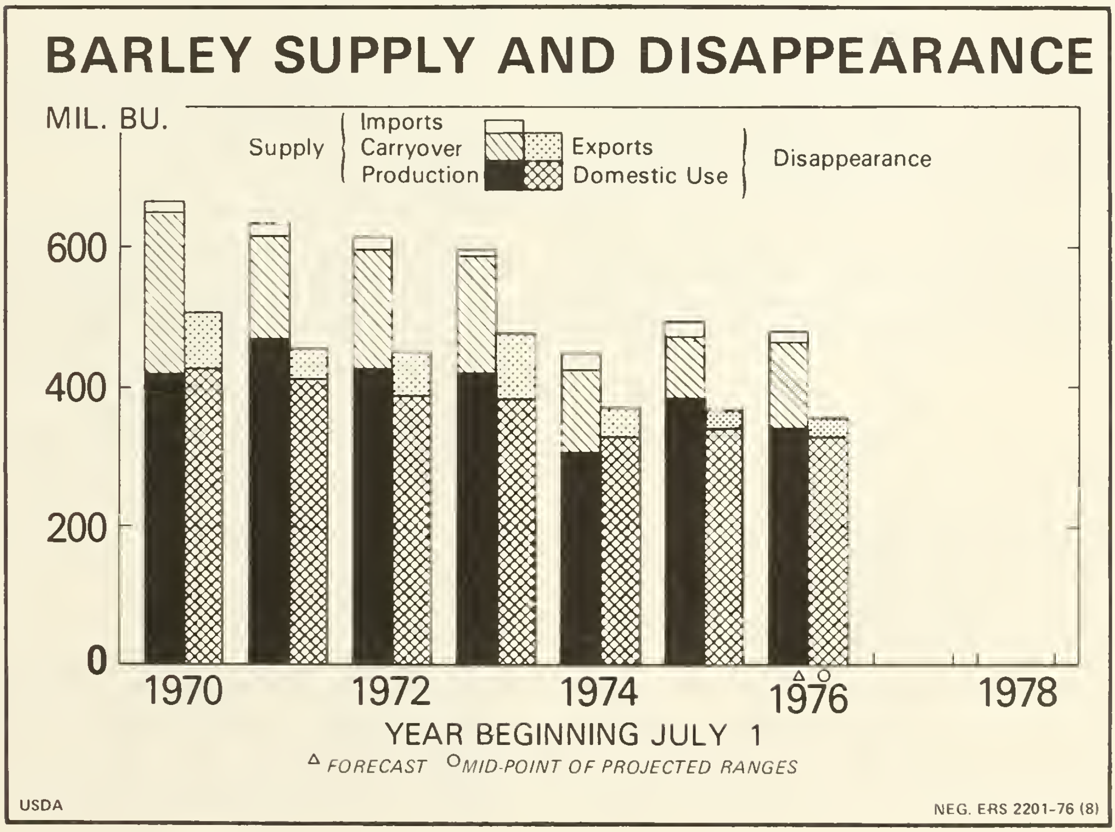
In October 1974, oats at Minneapolis came within a dime of reaching $2 per bushel. In June 1976, when it became apparent that the 1976 U.S. oat crop would be small, Minneapolis oat prices surged to a record $2.02 per bushel. However, with improved crop prospects and new crop oats available for the market, prices during August declined to $1.60-$1.70 per bushel. During much of the summer, oat prices have averaged about 115 percent of corn on a pound-for-pound basis. Traditionally, oat prices average about 90 percent of corn prices. With the present tight supply and commercial feeders switching to other grains, the 1976/77 oat price pattern could be relatively strong during the early season and weaken later from the impact of sluggish demand from feeders.

BARLEY

Supply Below 500 Million Bushels For Third Consecutive Year

Six years ago the U.S. barley supply stood at a record of almost 700 million bushels. But with acreage generally declining in favor of other crops, supplies have been below 500 million bushels for the past 2 years. This year's supply of about 480 million bushels would be the third consecutive sub-500 million bushel supply.


OATS SUPPLY AND DISAPPEARANCE


BARLEY SUPPLY AND DISAPPEARANCE

Barley seedings this year were off slightly. Extremely dry weather curbed yields in the Dakotas, Minnesota, and California. Yields in these States are forecast to be off 2 to 17 bushels from last year. But yields in Idaho, Montana, and Washington compare favorably to last year's good yields. Nationally, the average yield on August 1 was estimated at 41 bushels per acre, 3 bushels less than 1975. This yield would produce a crop of 341 million bushels, 11 percent less than in 1975.

Feed Demand Sluggish; Malt Demand Prospects Good

Barley fed to livestock and poultry in 1976/77 is projected at 180 million bushels, 6 percent less than a year ago. Relatively high prices of barley will likely cause some feeders to switch more to wheat, corn, or sorghum.

Barley use for malt liquors, distilled spirits, and food products is projected at 138 million bushels, about 4 million more than used in 1975/76. The recovery in the economy is expected to boost beer demand.

Production of malting varieties of barley appears to be ample to meet the needs of the malting industry, based on the following percentages malting varieties are of seedings: North Dakota and Minnesota virtually 100 percent; South Dakota 75 percent; Montana 60 percent; Idaho 50 percent; Oregon 25 percent; Washington 15 percent; and California 5 percent. About 160 million bushels of malting barley would be produced in 1976 on the basis of August 1 crop conditions. However, this estimate is probably on the low side since malting barley is often irrigated. In addition, there were fairly large stocks of old crop malting barley left on June 1. Minnesota and North Dakota stocks totaled 57 million bushels. On balance, it would seem that: (1) Malt producers likely will not have to use much, if any, feed barley; and (2) there may be some imports of Canadian malting barley where domestic local shortages exist and grower-maltster contracts cannot be met for specified quality. The 1976 Canadian barley crop is forecast at 465 million bushels, 6 percent above 1975.

U.S. barley exports by country of destination

Country	June-May		
	1973/74	1974/75	1975/76
	Million bushel	*Million bushel*	*Million bushel*
USSR	0.6	(1)	(1)
Canada	---	---	---
Korea, Rep. of	17.3	12.0	0.1
Czecholovakia	---	---	---
Germany, West	7.4	0.7	3.8
Japan	2.1	4.0	1.0
Poland	5.1	0.9	2.8
Cyprus	2.9	---	---
Mexico	7.7	8.9	2.2
China (Taiwan)	4.6	---	4.2
Greece	4.6	---	---
Italy	3.6	0.8	1.5
Unidentified	28.0	5.9	3.1
Other	5.1	6.7	4.1
Total	89.0	39.9	22.8

[1] Less than 500,000 bu.

Prices Decline from June Runup

When weather problems here and in Western Europe began to develop in June, both malt and feed barley markets moved up. From $2.40 a bushel in early May, Minneapolis feed barley rose 20 cents while malting barley surged from about $3 to $3.70 per bushel. These were unusual price movements, since May-June markets are influenced by new crop harvest and are typically weak.

Since mid-June, barley prices have tended to weaken as production is turning out larger than anticipated. Consequently, August prices of Minneapolis feed barley were being quoted at $2.40-$2.50 a bushel and malting barley at $3.10-$3.20 a bushel. Prices of feed barley are under pressure from the large wheat and corn crops and may weaken some more when the corn harvest hits full swing this fall. Malting barley prices may have seen their peak as supplies now appear to be adequate.

HIGH PROTEIN FEED

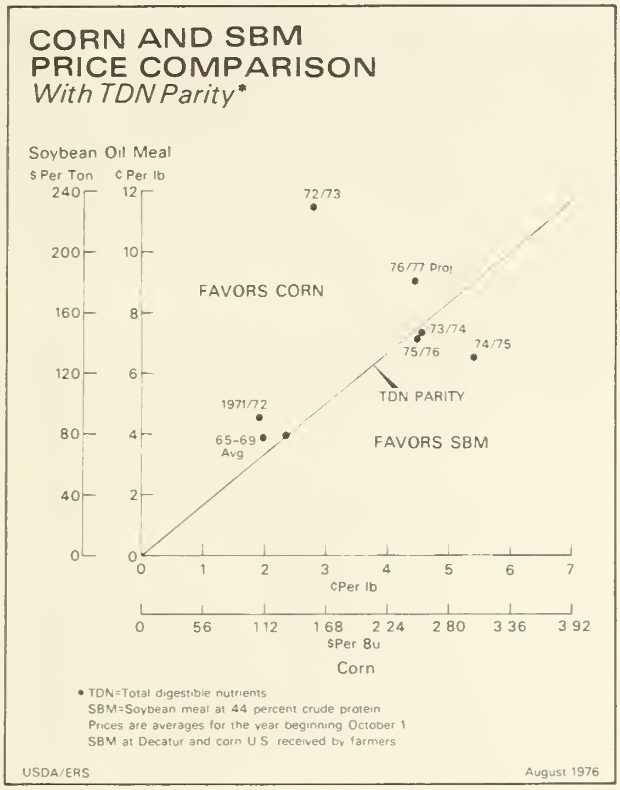
Market Behavior Indicates Shifts in 1976/77 Protein Usage

The developments in livestock and poultry feeding discussed on page 5 have tended to temper protein feed demand. It also appears that the heavy feeding of protein meal with respect to grains that occurred this season will be reversed in 1976/77 for the following reasons:

1. Prices of high energy feed grains compared to oilseed meals are low (see chart on page 13).
2. Prices of urea mixes for ruminant feeding hold a substantial competitive edge over oilseed meals (see chart on page 13).

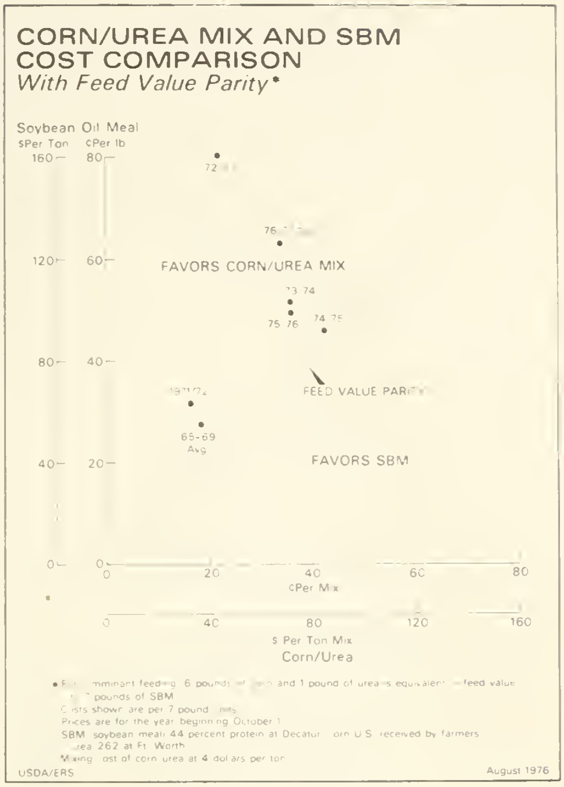
Prices to Average Higher; Soymeal Demand May Be Weaker

On the basis of a reduced crush, domestic disappearance for 1976/77 may drop to 13.7-15.1 million tons compared to last year's record breaking volume of 15.5 million tons. Meal demand this year has been phenomenal, up nearly a fourth from 1974/75. Expanding hog and poultry production,


CORN AND SBM PRICE COMPARISON
*With TDN Parity**

* TDN=Total digestible nutrients
SBM=Soybean meal at 44 percent crude protein
Prices are averages for the year beginning October 1
SBM at Decatur and corn U S received by farmers

USDA/ERS August 1976


CORN/UREA MIX AND SBM COST COMPARISON
*With Feed Value Parity**

* For ruminant feeding 6 pounds of corn and 1 pound of urea is equivalent in feed value to 7 pounds of SBM
Costs shown are per 7 pound units
Prices are for the year beginning October 1
SBM soybean meal, 44 percent protein at Decatur, corn U S received by farmers
urea 262 at Ft Worth
*Mixing cost of corn urea at 4 dollars per ton

USDA/ERS August 1976

favorable prices compared to other feed concentrates, reduced supplies of cottonseed meal, plus some buildup in pipeline stocks are major factors resulting in heavy meal demand during this year. For the upcoming feeding year, demand will slacken with a slowdown in hog and poultry expansion plus a return to more normal protein-grain price relationships.

Smaller supplies of soybeans will be reflected in 1976/77 meal prices averaging about $180 per ton, sharply above the $125-ton average this year. However, the price pattern in 1976/77 may be tricky. Feeding margins will largely determine meal prices until next spring. Later, crop prospects, here and abroad, will largely influence protein feed markets coupled with prevailing demand.

Cottonseed Meal Prices Up Sharply; Larger Supply in Prospect

Cottonseed meal supplies for the marketing year which began August 1 likely will total about 1.8 million tons, up about a third from last year. Increased crushings from the larger cotton crop in prospect account for the expanded availabilities.

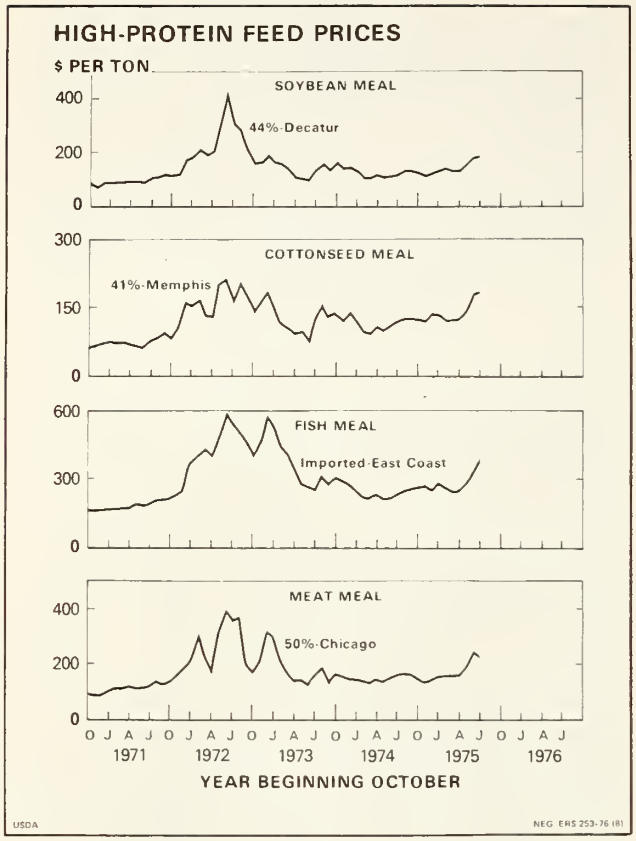
Domestic disappearance is estimated at 1.7 million tons, compared with 1.3 million last season. Despite high cottonseed meal prices, domestic demand is expected to absorb most of this season's output.

Cottonseed meal prices (41 percent protein, Memphis) are strong. During 1975/76 they averaged $142 per ton compared with $124 for the previous year. Prices were relatively stable until last spring when they shot up from $130 in April to $185 in July. Strong domestic and foreign demand for oilseed meals and prospects for a smaller 1976 soybean crop were major factors boosting prices. In late August, prices were around $185-$190 per ton.

Other Protein Feeds May Help to Cover Forage Deficits

Grain protein supplies may reflect some increase for 1976/77 from the current year's level due to strong regional demand. Brewers' grains in hay-short dairy areas may command a premium. Distillers' dried grains and corn gluten will also hold their own if foreign buyers continue active in this market.

Animal and marine protein feed markets may reflect competitive bidding from European buyers as feed-short farmers in Europe bid for limited world-wide supplies.



HAY

Drought Reduces Hay Production; Prices Record High

The 1976 production of all hay was estimated as of August 1 at 120 million tons, 9 percent less than 1975 production. The index of U.S. hay and forage production stood at 101 (1967=100), lowest since 1970.

The drop in 1976 hay production mainly reflects reduced yields as a result of drought in Wisconsin, Minnesota, North and South Dakota, and relatively dry spring weather in much of the rest of the country. Production is estimated larger than last year only in Texas, New Mexico, Wyoming, and along the Atlantic Coast. Yield of all hay is forecast at 1.97 tons per acre, compared with 2.15 tons in 1975 and 2.10 in 1974. Farmers and ranchers expect to harvest hay from 61.2 million acres, 1 percent less than in 1975.

Production of alfalfa and alfalfa mixtures is forecast at 69 million tons, 11 percent less than in 1975. Among the five leading alfalfa producing States, only in California, the second-largest producer, is the 1976 harvest expected to be about the same as in 1975. A large part of the California hay crop is grown under irrigation. In the four other leading States—Minnesota, Wisconsin, Iowa, and Nebraska—production is off sharply.

The hay supply for 1976/77 was indicated as of August 1 at 146 million tons, down from 152 million tons in 1975/76. But with a smaller cattle inventory, the number of roughage consuming animal units is down to 94.7 million from 98.6 million in 1975, a reduction of the same proportion. While hay supplies per unit for the United States are about the same as last year, there is considerable variation in different parts of the country. Supplies are generally short in major dairy areas and point to the need to feed more silage and concentrates. Supplies also are short in some beef areas and may lead to unusually large marketings of feeder stock and continued culling of breeding herds this fall.

In May, June, and July, the first 3 months of the hay marketing year, prices received by farmers for hay were at an all-time high, and averaged 14 percent higher than a year earlier. The smaller supply and reported increases in hay exports suggest that the seasonal price decline, if any, will be modest and current prices may carry into the fall and winter season.

Table 2.--Hay (all): Acreage, supply, disappearance, and prices, 1972-76

Item	Unit	1972/73	1973/74	1974/75	1975/76 prel.	1976/77 1/
Acreage harvested	Mil. acres	59.8	62.1	60.6	61.9	61.1
Yield per acre	Tons	2.15	2.17	2.10	2.15	1.97
Carryover (May 1)	Mil. tons	25.5	24.3	25.5	18.6	25.6
Production	"	128.6	134.8	127.1	132.9	120.3
Supply	"	154.1	159.1	152.6	151.5	145.9
Disappearance	"	129.8	133.6	134.0	125.9	
Roughage-Consuming Animal Units (RCAU)	Mil. units	93.2	99.5	103.2	98.6	94.7
Supply per RCAU	Tons	1.65	1.60	1.48	1.54	1.54
Disappearance per RCAU	Tons	1.39	1.34	1.30	1.28	
Season price received by farmers	$ per ton	31.30	41.60	50.90	53.00	
Sold by farmers	Mil. tons	25.8	27.3	25.6	26.8	
Proportion of crop	Percent	20	20	20	20	
Value of production	$ Mil.	3,732	5,023	5,827	6,544	
Value of sales	$ Mil.	808	1,135	1,304	1,423	

1/ August 1 indications.

Table 3.--Hay production and prices received by farmers

Year	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
	- - - - Million tons - - - -						
1972	10.3	21.8	45.7	5.6	15.0	30.2	128.6
1973	11.9	22.8	44.4	6.0	19.1	30.6	134.8
1974	11.7	21.9	39.8	5.9	17.1	30.7	127.1
1975	11.6	23.4	42.7	6.0	18.2	31.0	132.9
1976	11.8	19.7	35.8	5.3	17.5	30.2	120.3
July	Pennsylvania	Wisconsin	Kansas	Georgia	Texas	Colorado	California
	- - - - Dollars per ton - - - -						
1972	37.00	25.00	25.00	38.00	35.50	31.00	34.50
1973	34.00	27.50	30.00	35.00	32.50	41.00	42.00
1974	37.50	29.00	41.00	37.00	45.50	45.50	62.00
1975	49.50	44.00	44.50	41.00	48.00	53.50	59.00
1976	49.50	59.50	47.50	47.00	50.50	54.50	74.50

FEED UTILIZATION FOR BEEF PRODUCTION

by
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Commodity Economic Division

ABSTRACT: Feed conversion rates for beef may appear high compared to other species of livestock but much of the fibrous feed consumed as feed by cattle could not be utilized effectively by swine and poultry. Most of the nutrients consumed by beef cattle come from forage feeds. Average feed units per pound of liveweight production was for the 1965/66 to 1975/76 period 14.2 for all beef cattle, 8.2 for cattle on feed, and 16.8 for other beef cattle. Comparison of 2 feeding systems show a marked advantage for a combination roughage/concentrate system.

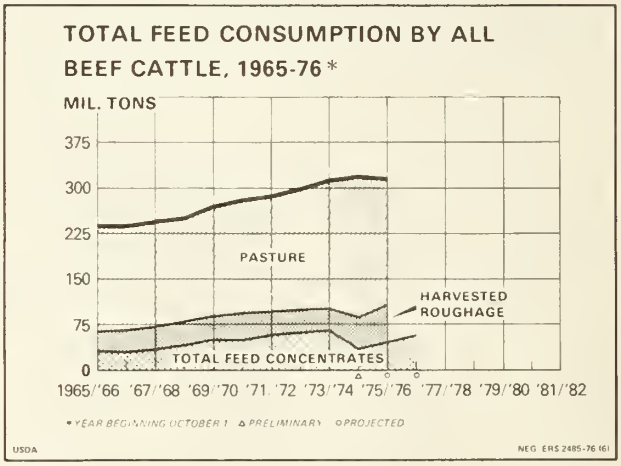
KEYWORDS: Feed conversion, beef cattle, cattle on feed, feed units, forage, pasture, roughage, concentrate.

Beef Cattle Ration Mainly Roughage

Forage feeds represents a tremendous food reservoir utilized by ruminants. Beef cattle are by far our largest class of ruminants. Recent developments have brought attention to the concentrates utilized in the national beef cattle ration without due recognition to the role of roughage. Trends toward greater grain consumption by beef cattle are often interpreted as irreversible and support the belief that beef cattle are increasingly competing with humans for grain. However, the increased use of grains is a result of production technologies which have provided economic incentives for marketing grain through beef cattle.

Feed conversion rates for beef appear very high compared to hogs and broilers. But often overlooked is the fact that about one-half of a fed steer's slaughter weight is achieved prior to concentrate feeding.

Using a feed unit as a common demoninator, we can compare the quantities of concentrates and forages fed to beef cattle on a feed equivalent basis.[1] Pasture and harvested forage account for around four-fifths of all feed in beef production (table 1). A breakdown of roughage components into hay, silage, straw and stover, and pasture indicates the overwhelming role of pasture in forage, accounting for about 80 percent of the total.[2]


TOTAL FEED CONSUMPTION BY ALL BEEF CATTLE, 1965-76*

* YEAR BEGINNING OCTOBER 1 △ PRELIMINARY ○ PROJECTED

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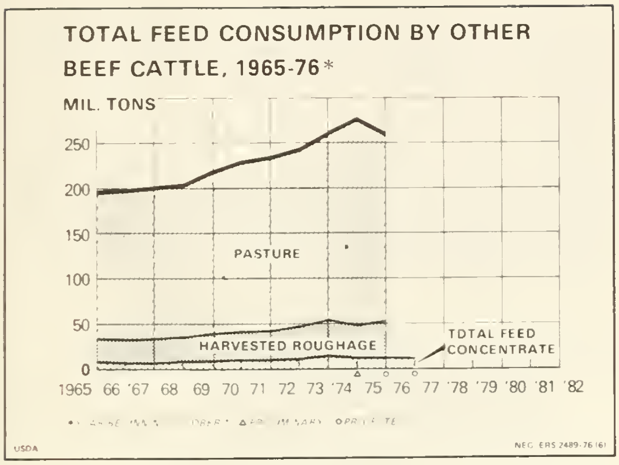
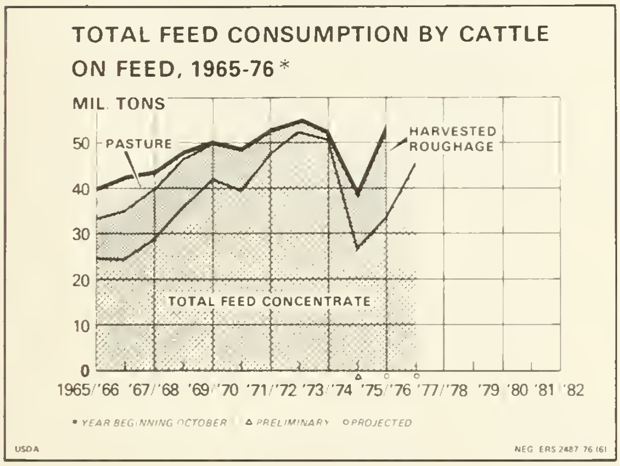
[1] A feed unit is the quantity of any feed containing feed value equivalent to corn at 13.5 percent moisture and 78.6 percent total digestible nutrients. See ERS Stat. Bul. 530, table 99, June 1974.

[2] These estimates which are based on feeding practices from State Agricultural Experiment Stations, are consolidated by the National Academy of Sciences. See Report of the Committee on Animal Nutrition, *Nutrient Requirements of Beef Cattle, 1971*, 0-309-01754-8.


TOTAL FEED CONSUMPTION BY OTHER BEEF CATTLE, 1965-76*


TOTAL FEED CONSUMPTION BY CATTLE ON FEED, 1965-76*

Two systems of feeding are used in measuring feed conversion ratios for beef production: (1) primarily roughage (nonfed beef), and (2) combination of roughage to around 500 pounds and concentrate feeding to slaughter (fed beef). Liveweight gains achieved in feedlots are estimated annually since placements weights are not reported. Weight gains outside the feedlot can be derived as a residual from total annual liveweight production. Feed intake relative to liveweight production show only moderate changes over the last 10 years (table 2).

Total Feed Less Under Concentrate Feeding

Turning to some of the economic aspects we can see why the industry has trended to fed cattle slaughter supplies.

If a calf is born in mid-January or February chances are it will be weaned by late August. Weaning weight will approach 500 pounds. A month or 2 later it enters a feedlot for approximately 180 days. Feed units consumed by this system would be about 12,000 pounds. Time elapsed from calving to market would average 15 months for a 1,000-pound steer. The illustration used is fairly representative of the performance for beef calves of both sexes.

If the same calf were raised to slaughter weight without confined feeding, total feed unit consumption would be about 30 percent greater. In addition, the time required to achieve the 1,000-pound market weight would be stretched out by as much as a year. Thus, the cow/calf producer's cash flow or turnover would be reduced and there would be greater risk of death loss prior to slaughter. The following compares the 2 systems of cattle feeding:

Feeding Systems	Length of feed	Total	Per pound of gain
	Days	*Pounds*	*Pounds*
Fed Beef			
0-500 pounds	270	8,250[1]	16.5
501-1,000 pounds ...	180	3,700	7.4
Total or avg.	450	11,950	11.9
Non-Fed			
0-500 pounds	270	8,250[1]	16.5
501-1,000 pounds ...	460	8,250	16.5
Total or avg.	730	16,500	16.5

[1] Includes feed consumed by dam.

Least Cost System for Beef Production

Why does a cow/calf rancher sell yearling calves when greater profits might accrue by growing them out to slaughter market weights? Generally his options, insofar as feed is concerned, involve the length of feeding and costs of available feeds. Feedlot cattle consume large quantities of concentrate which most cow/calf producers rarely have in

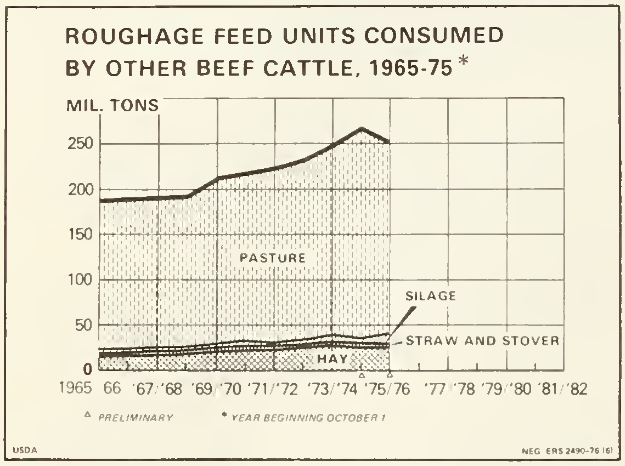
Year October 1	Corn price[1]	Hay (roughage) price[1]	Hay/Corn
	Cents per pound		*Percent*
1965/66	2.1	2.8	133
1966/67	2.2	3.0	136
1967/68	1.8	3.0	167
1968/69	1.9	2.9	153
1969/70	2.1	3.0	143
1970/71	2.4	3.2	133
1971/72	1.9	3.4	179
1972/73	2.8	3.8	136
1973/74	4.6	5.1	111
1974/75	5.3	6.2	117

[1] Prices received by farmers. Hay adjusted to corn equivalent using factor of 2.44

sufficient quantities. Hay and pasture are the basic feeds for cow/calf operations. To feedout the entire calf crop could stretch roughage feed requirements beyond what could be profitably utilized by on-farm production and would necessitate "out-of-pocket" feed purchases.

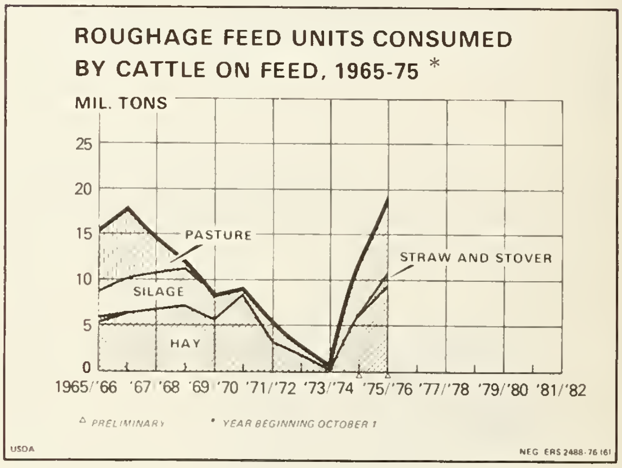
To compare feed costs we used season average prices received by farmers for corn and hay, which is used as a proxy for all roughages. When hay is adjusted to nutrient values to corn and hay prices, we find that corn has been consistently cheaper than hay on a unit basis. The preceding table lists unit pound price on a nutrient equivalent basis for corn and hay (roughage):

Thus with corn (and other grains) prices consistently below the price of hay on a nutrient basis, the expansion of cattle feedlots was a response to the economics of feeding. Cow/calf producers have had an expanded market for their calves and consumers benefited from larger beef supplies.


ROUGHAGE FEED UNITS CONSUMED BY OTHER BEEF CATTLE, 1965-75 *

△ PRELIMINARY * YEAR BEGINNING OCTOBER 1

USDA NEG ERS 2490-76 (6)


ROUGHAGE FEED UNITS CONSUMED BY CATTLE ON FEED, 1965-75 *

△ PRELIMINARY * YEAR BEGINNING OCTOBER 1

USDA NEG ERS 2488-76 (6)

Table 1.--Total feed consumption measured in feed units by all beef cattle, cattle on feed for the slaughter market, and other beef cattle, selected years 1965/66 to 1976/77

Year beginning Oct. 1	Feed grains					Byproduct feed ingredients	Total feed concentrates	Harvested roughage	Pasture	Total all feed
	Corn	Sorghum grains	Oats	Barley	Wheat and rye					
					- - - - Thousand tons - - - -					
All beef cattle:										
1965/66	17,932	7,255	981	1,653	923	4,431	33,175	32,550	169,973	235,698
1966/67	12,552	10,604	875	3,620	1,017	4,241	32,909	34,195	172,277	239,381
1967/68	18,166	9,173	920	2,032	1,709	4,897	36,897	35,412	171,210	243,519
1968/69	21,062	11,080	1,099	2,384	2,266	5,880	43,771	37,296	167,660	248,727
1969/70	26,186	11,761	1,148	2,640	3,126	6,621	51,482	38,183	180,061	269,726
1970/71	21,456	13,264	1,286	3,241	3,469	6,798	49,514	43,563	186,747	279,824
1971/72	26,662	13,920	1,415	3,279	4,469	7,502	57,247	36,630	192,184	286,061
1972/73	34,886	13,628	1,125	2,769	2,905	7,904	63,217	37,422	196,448	297,087
1973/74	37,299	13,952	1,437	3,094	1,328	8,989	66,099	40,341	206,493	312,933
1974/75 1/	19,977	6,437	990	1,794	1,250	6,994	37,442	49,863	230,338	317,643
1975/76*	24,619	8,343	1,076	2,001	2,709	6,480	45,228	61,795	208,630	315,653
Cattle on feed:										
1965/66	13,425	6,343	321	1,275	857	2,569	24,790	8,825	6,203	39,818
1966/67	9,061	8,717	280	2,922	949	2,895	24,824	10,152	7,499	42,475
1967/68	13,982	8,179	320	1,624	1,625	3,020	28,750	10,809	3,515	43,074
1968/69	16,931	10,055	433	1,969	2,178	3,804	35,370	11,382	626	47,378
1969/70	21,229	10,702	460	2,193	3,010	4,397	41,991	8,099	---	50,090
1970/71	16,792	11,943	479	2,645	3,325	4,407	39,591	8,946	---	48,537
1971/72	21,893	12,737	588	2,751	4,312	5,057	47,338	5,459	---	52,797
1972/73	28,926	12,543	490	2,352	2,812	5,462	52,585	2,658	---	55,243
1973/74	29,466	12,509	523	2,499	1,254	5,656	51,907	524	---	52,431
1974/75 1/	14,428	5,422	275	1,327	1,153	3,853	26,458	12,229	---	38,687
1975/76*	18,476	7,242	333	1,530	2,568	3,666	33,815	19,544	---	53,359
Other beef cattle:										
1965/66	4,507	912	660	378	66	1,862	8,385	23,725	163,770	195,880
1966/67	3,491	1,130	595	698	68	2,103	8,085	24,043	164,778	196,906
1967/68	4,184	994	600	408	84	1,877	8,147	24,603	167,695	200,445
1968/69	4,131	1,025	666	415	88	2,076	8,401	25,914	167,034	201,349
1969/70	4,957	1,059	688	447	116	2,224	9,491	30,084	180,061	219,636
1970/71	4,664	1,321	807	596	144	2,391	9,923	30,470	186,747	227,140
1971/72	4,769	1,183	827	528	157	2,445	9,909	31,171	192,184	233,264
1972/73	5,960	1,085	635	417	93	2,442	10,632	34,764	196,448	241,844
1973/74	7,833	1,443	914	595	74	3,333	14,192	39,817	206,493	260,502
1974/75 1/	5,729	1,015	715	467	97	2,961	10,984	37,634	230,338	278,956
1975/76*	6,143	1,101	743	471	141	2,814	11,413	42,251	208,630	262,294

1/ Preliminary. *Projected.

Table 2.--Total feed unit consumption to liveweight beef production 1965/66-1975/76

Year beginning Oct. 1	Total feed unit consumption	Total liveweight production	Feed units to liveweight production
	Thousand tons	Million pounds	Pounds
All beef cattle:			
1965/66	235,698	34,658	13.60
1966/67	239,381	35,768	13.39
1967/68	243,519	36,365	12.90
1968/69	248,727	36,923	13.47
1969/70	269,726	38,700	13.94
1970/71	275,677	39,296	14.03
1971/72	286,152	40,702	14.06
1972/73	297,087	41,073	14.47
1973/74	312,933	42,269	14.81
1974/75 1/	317,643	41,119	15.45
1975/76 1/	311,425	40,170	15.51
Cattle on feed:			
1965/66	39,818	9,889	8.05
1966/67	42,475	10,394	8.17
1967/68	43,074	11,471	7.51
1968/69	47,378	12,161	7.79
1969/70	50,090	12,417	8.07
1970/71	48,537	12,725	7.63
1971/72	52,797	13,631	7.75
1972/73	55,243	12,894	8.57
1973/74	52,431	10,922	9.60
1974/75 1/	38,686	8,973	8.62
1975/76 1/	49,131	11,800	8.33
Other beef cattle:			
1965/66	195,880	24,769	15.82
1966/67	196,906	25,374	15.52
1967/68	200,445	24,894	16.10
1968/69	201,349	24,762	16.26
1969/70	219,636	26,283	16.71
1970/71	227,140	26,571	17.10
1971/72	233,264	27,071	17.23
1972/73	241,844	28,179	17.16
1973/74	260,502	31,347	16.62
1974/75 1/	278,956	32,146	17.36
1975/76 1/	262,294	28,370	18.49

1/ Preliminary.

JULY-SEPTEMBER FEED DEMAND FOR CORN[1]

by
Robert Butell and Abner Womack
Commodity Economics Division

ABSTRACT: Corn feeding is normally lightest in the fourth quarter of the marketing year (July-September). Multiple regression analysis is used in determining important variables affecting corn feed use. In July-September, as in April-June, current feed demand is directly linked to lagged prices of livestock, corn, and soybean meal, which reflect earlier conditions in markets for livestock and poultry. Livestock output and corn prices in the current quarter also influence feed demand. The July-September quarter is somewhat unique in that wheat can directly compete with corn in many areas as a livestock feed due to wheat's usual seasonal low price at harvest when corn is typically at its seasonal high. Projected corn feeding in July-September 1976 is substantially above the 1975 level, which indicates a continuation of the expansion in feed use that began early in 1976.

KEYWORDS: Corn, feed demand, wheat feeding, feed-livestock prices, July-September quarter.

This article, the fourth in a series, examines factors that influence quarterly feed demand for corn.[2] The appraisal relates corn feed use in the July-September quarter (QCDF4) to explanatory variables associated with the U.S. livestock industry.

Since 1956/57, feed demand in the July-September quarter relative to annual consumption has ranged from over 22 percent in 1967/68 to just under 14 percent in 1974/75. Since 1966, July-September corn feed use has exceeded 600 million bushels except last year.

The equation in this report is similar to the one used for April-June except for the inclusion of the quantity of wheat fed. This is due to the fact that new crop wheat prices are often at a seasonal low, while corn prices are often at a seasonal high.

July-September feed demand is directly linked to decisions made by livestock and poultry producers in the previous three quarters. Three current factors are combined with lagged input-output prices in explaining current levels of corn fed to livestock. Statistical results are given below for the historical period 1956/57 to 1974/75. Numbers in parentheses below the equation coefficients are a measure of statistical reliability—"t" statistic for which a value of 2 to 3 suggests statistical reliability. The bracketed terms below the coefficients are elasticities computed at mean values of variables—which express each coefficient as a percentage change.

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[1] The analysis is based on the July-September quarter instead of the new June-September intra-marketing year period because actual historical data are not yet available for the new period. However, the same determinants of feed use would apply to the new period. In addition, the October-December quarter has been respecified in order to reflect the influence of lagged prices.

[2] Robert Butell and Abner Womack, "October-December Feed Demand for Corn" *Feed Situation*, Economic Research Service, USDA, FdS-259, November 1975; "January-March Feed Demand for Corn," *Feed Situation*, Economic Research Service, USDA, FdS-260, February 1976; "April-June Feed Demand for Corn," *Feed Situation*, Economic Research Service, USDA, FdS-261, May 1976. Related research references are contained in the bibliography of the first of these articles.

$$\begin{array}{lll} QCDF4 = -254.91 + 379.5594LO & + & 30.5067(PM)^* \\ \qquad\qquad\qquad\quad (6.05) & & (2.78) \\ \qquad\qquad\qquad\quad {[1.13]} & & {[.20]} \end{array}$$

$$\begin{array}{lll} -136.8392PC & - 1.6858QWFED & + 1.4161(PL/PC)^* \\ (3.57) & (4.50) & (3.83) \\ {[-.31]} & {[-.17]} & {[.55]} \end{array}$$

$R^2 = .87$ S.E. = 42.6 D.W. = 2.13

Variable definitions are:

QCDF4: Quantity of corn fed in July-September (mil. bu.).

LO: Measure of volume of production of beef, pork, and broilers in July-September (quantities weighted by 1957-59 farm prices, expressed in billion dollars).

(PM)*: Average price of soybean meal for the previous three quarters, bulk Decatur, 44 percent (cents/lb.).

PL: Index of prices received by farmers for livestock and livestock products in quarter (1910-14=100).

PC: Average price received by farmers for corn in July-September ($/bu.).

QWFED: Quantity of wheat fed in July-September (mil. bu.).

(PL/PC)*: Average livestock-corn price ratio for the previous three quarters.

Current corn price has a negative coefficient which implies that higher corn prices discourage corn feed use. In contrast, increases in value of livestock output (LO) will increase current feed demand for corn. Likewise, with an increase in the lagged livestock-corn price ratio (PL/PC)* and the lagged price of soybean meal (PM)* the quantity of corn fed increases. The livestock-corn price ratio in the current quarter did not improve the equation.

Wheat feeding is heaviest in the July-September quarter, when feed grain supplies are at their seasonal low while wheat supplies are largest because of new crop harvest. Neither the current price of wheat nor the price differential between wheat and corn satisfactorily captured the strong influence of wheat feeding in the feed demand equation for corn. These relationships suggest that a 10-percent increase in wheat fed leads to a decline of about 2 percent in corn feeding.

The current price for livestock proved to be insignificant, which suggests that current feeding is set to a large extent by placements or biological lags and leads. Current livestock output (LO) is an especially important variable in terms of its impact on feed consumption. A 10-percent increase in output of livestock products (LO) generates around an 11-percent increase in corn fed as might be expected.

The direct price elasticity of corn implies that a 10-percent increase in price will result in about a 3-percent decline in feed use. However, a 10-percent increase in the lagged livestock-corn price ratio (PL/PC)* for recent quarters would result in a corresponding 5- to 6-percent increase in corn fed. If lagged soybean meal prices (PM)* increase 10 percent, corn feeding would increase about 2 percent.

The determining variables used in this analysis explain about 87 percent of the variance in corn feed use during the period 1957 to 1975. Using actual values of the variables, the figure shows that the equation tracks well even for the large downturns in 1974 and 1975.

Estimating Feed Use for July-September 1976

To illustrate the use of the analytical framework, the July-September 1976 quarter was projected based on the best judgment available for the determining independent variables:

(PM) * = 6.8 (¢/lb.)
PC = 2.60 ($/bu.)
QWFED = 100 (mil. bu.)
(PL/PC)* = 201.7

The estimated livestock output aggregate (LO) suggests an output rate 10 percent above the same period in 1975. The production aggregate was calculated as follows:

Item	Production	1957-59 prices	Value
	Mil. lbs.	*Cents/lb.*	*$ Bil.*
Beef	6,400	23.52	1.505
Pork	2,900	17.94	.520
Broilers	2,330	17.80	.415
Total	11,630		2.440

Estimates based on the analysis indicate a sizable expansion in feed use of corn in July-September over a year earlier. A much higher lagged livestock-corn price ratio, a higher lagged soybean meal price, and a lower current corn price all suggest an expansion in corn feeding. On the other hand, the expected increase in wheat feeding this season, due to relatively low prices for wheat, would tend to offset a part of the gains suggested by other factors.

The analysis suggests estimated corn feed use of around 640 million bushels, or 45 percent above the very low feeding level in 1975. These results, of course, partly depend on the accuracy of the estimates of the price for corn, livestock output, and wheat fed. However, the other two lagged variables are known values.

This projection should be considered in relation to other market conditions and indicators for feed demand shown on page 5 of the *Feed Situation*. Animal inventory numbers generally support the level of July-September feed use shown by the equation results. Cattle on feed inventories on July 1 in the 23 major cattle feeding States were up 17 percent from a year earlier. The December 1975-May 1976 pig crop was 16 percent above last year's small pig crop. Broiler meat production is about 12 percent above year-earlier levels.

October-December Feed Demand For Corn Revisited

Results for the last three quarters of the October-September corn feeding year indicate that quarterly corn feeding is influenced by prices several quarters back when decisions are made by livestock producers in adjusting herd size. Once herd size is set, then feed use is largely a function of feeding rates and the biological feeding period.

The October-December analysis reported in the November 1975 *Feed Situation* specified only current economic variables.[3] While the forecasting equation tracked well historically, it did poorly in 1975. Very favorable livestock-feed price relationships for feeding had been tempered by extremely poor feeding conditions in 1974 and early in 1975. There was also a dramatic shift from fed to nonfed beef. Consequently, the authors have respecified the equation to include a lagged price ratio and fed beef production instead of total beef production.

The equation given below supersedes the equation published in November 1975. Numbers in parentheses are "t" statistics, bracketed terms are elasticities computed at mean values of the variables.

$$\mathrm{QCDF1} = -155.96 + \underset{\substack{(1.31)\\ {[.17]}}}{.7477\,(\mathrm{PL}/\mathrm{PC})^*} + \underset{\substack{(4.54)\\ {[.50]}}}{364.2846\,\mathrm{LO}}$$

$$+ \underset{\substack{(3.94)\\ {[.29]}}}{.9630\,\mathrm{PL}} + \underset{\substack{(1.72)\\ {[.19]}}}{111.2436\,(\mathrm{PM}/\mathrm{PC})}$$

$R^2 = .93$ S.E. = 64.5 D.W. = 1.71

Variable definitions are:

QCDF1: Quantity of corn fed in October-December (mil. bu.).
LO: Measure of volume of production of fed beef, pork, and broilers in October-December (quantities weighted by 1957-59 farm prices, expressed in billion dollars).
PL: Index of prices received by farmers for livestock and livestock products in October-December (1910-14 = 100).
PM: Average price of soybean meal in October-December, bulk Decatur, 44 percent (cents/lb.).
PC: Average price received by farmers for corn in quarter ($/bu.).
(PL/PC)*: Average livestock-corn price ratio for the previous three quarters.
PM/PC: Average price ratio in October-December (lb. for lb. basis).

Forecasts for independent (explanatory) variables are provided for the October-December 1976 quarter (see table 2). Greater livestock output, a higher lagged livestock/corn price ratio, and a higher soybean meal/corn price ratio all indicate an expansion in October-December corn feed use in 1976 over 1975. However, this expansion is tempered by lower expected prices for livestock. Using the values shown, the equation gives an estimated feed use of 1,310 million bushels, about 16 percent above the low level of a year ago.

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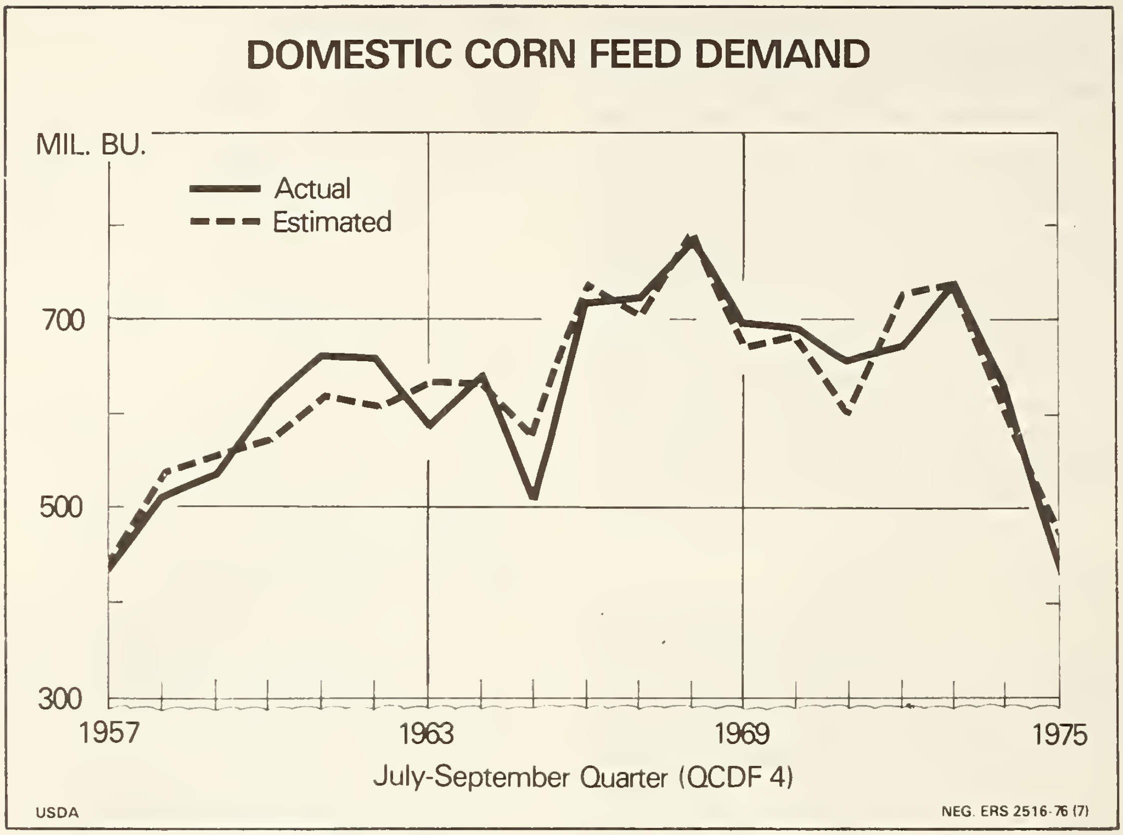
[3] Robert Butell and Abner Womack, "October-December Feed Demand for Corn" *Feed Situation*, Economic Research Service, USDA, FdS-259, November 1975.


DOMESTIC CORN FEED DEMAND
MIL. BU.
Actual
Estimated
700
500
300
1957
1963
1969
1975
July-September Quarter (QCDF 4)
USDA
NEG. ERS 2516-76 (7)

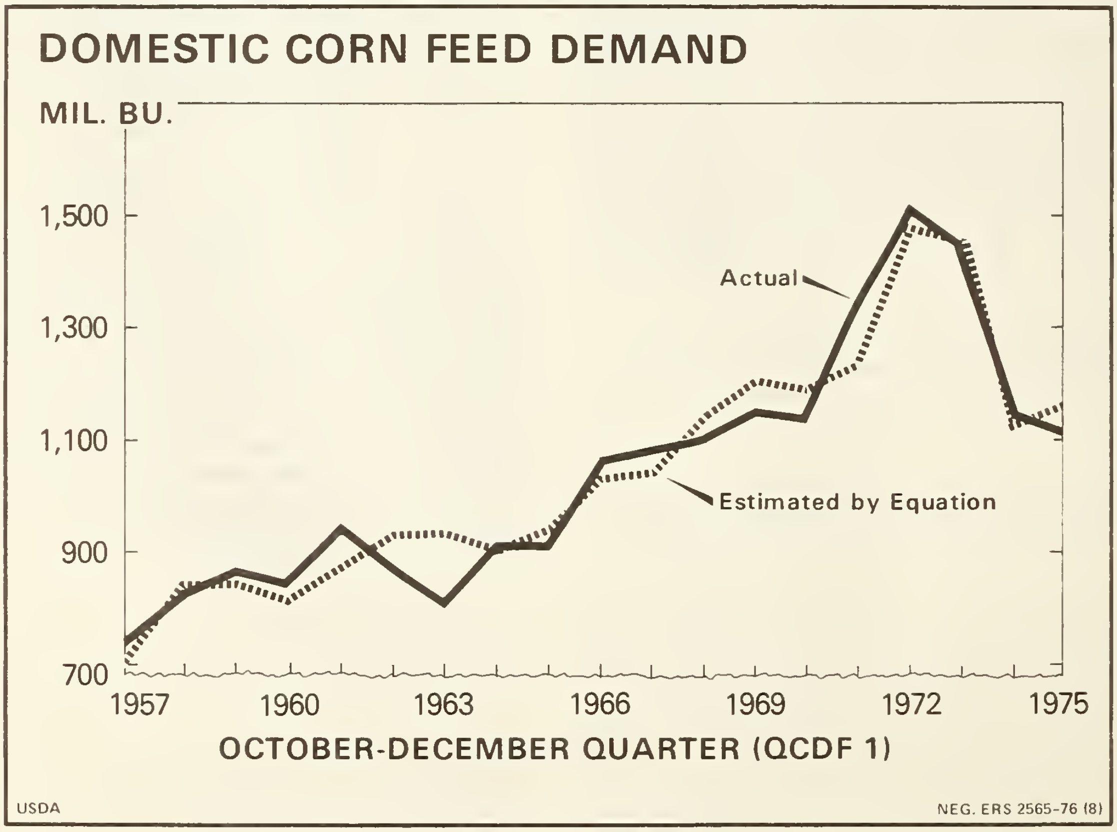

DOMESTIC CORN FEED DEMAND
MIL. BU.
1,500
1,300
1,100
900
700
Actual
Estimated by Equation
1957
1960
1963
1966
1969
1972
1975
OCTOBER-DECEMBER QUARTER (QCDF 1)
USDA
NEG. ERS 2565-76 (8)

Table 1.--Corn: Quantity used for livestock feed in July-September quarter and related variables, United States, 1956/57 to 1975/76

Year beginning Oct. 1	Quantity of corn demand for feed July-Sept. (QCDF4)	Value aggregate (1957-59 farm prices) of beef, pork, and broiler production July-Sept. (LO)	Lagged livestock/ corn price ratio (PL/PC)*	Lagged wholesale price of soybean meal (PM)*	Price received by farmers for corn July-Sept. (PC)	Quantity of wheat fed to livestock July-Sept. (QWFED)	Quantity of corn demand for feed annual (QCDFY)
	Mil. bu.	Bil. dol.		Cents per lb.	Dol. per bu.	Mil. bu.	Mil. bu.
1956/57	437.2	1.366	190.9	2.32	1.20	0	2,378.3
1957/58	512.6	1.369	257.3	2.51	1.16	5	2,533.8
1958/59	535.5	1.436	251.3	2.81	1.12	15	2,783.0
1959/60	611.7	1.507	243.1	2.84	1.07	16	3,043.0
1960/61	665.5	1.549	259.4	2.97	1.04	18	3,092.2
1961/62	661.9	1.545	248.6	3.04	1.04	14	3,212.5
1962/63	590.1	1.668	232.9	3.52	1.20	10	3,155.8
1963/64	639.7	1.769	211.4	3.63	1.14	20	3,008.9
1964/65	513.0	1.806	204.4	3.46	1.19	50	2.956.1
1965/66	715.9	1.918	247.9	3.85	1.32	15	3,361.2
1966/67	723.9	1.971	218.4	3.94	1.15	35	3,328.1
1967/68	780.7	2.272	264.7	3.73	1.01	100	3,508.2
1968/69	697.6	2.101	280.3	3.68	1.17	128	3,579.2
1969/70	695.3	2.173	295.7	3.85	1.30	140	3,796.3
1970/71	659.0	2.270	225.0	3.92	1.22	164	3,581.3
1971/72	671.9	2.215	323.9	4.29	1.17	170	3,977.8
1972/73	743.9	2.031	310.0	10.80	2.29	136	4,310.0
1973/74	631.7	2.301	197.7	7.36	3.19	53	4,193.0
1974/75	444.1	2.219	148.6	6.54	2.81	80	3,191.0
1975/76 1/	640.0	2.440	201.7	6.80	2.60	100	3,650.0

1/ Forecast.

Table 2.--Corn: Quantity used for livestock feed in October-December quarter and related variables, United States, 1957/58 to 1976/77

Year beginning Oct. 1	Quantity of corn demand for feed Oct.-Dec. (QCDF1)	Value aggregate (1957-59 farm prices) of fed beef, pork, and broiler production Oct.-Dec. (LO)	Lagged livestock/ corn price ratio (PL/PC)*	Price received by farmers for livestock and livestock products, 1910 - 14 = 100 Oct.-Dec. (PL)	Soybean meal/ corn price ratio Oct.-Dec. (PM/PC)
	Mil. bu.	Bil. dol.		Index	
1957/58	746	.923	198.4	255	1.26
1958/59	830	1.015	252.2	273	1.55
1959/60	872	1.105	236.2	245	1.64
1960/61	854	1.071	238.2	260	1.43
1961/62	954	1.162	246.7	252	1.63
1962/63	868	1.215	247.0	260	1.92
1963/64	810	1.328	217.3	242	1.94
1964/65	913	1.360	206.5	236	1.69
1965/66	914	1.303	209.5	277	1.86
1966/67	1,077	1.487	237.2	283	1.79
1967/68	1,096	1.532	226.4	270	1.99
1968/69	1,106	1.607	273.5	291	2.04
1969/70	1,149	1.707	279.5	331	1.95
1970/71	1,144	1.832	277.0	303	1.66
1971/72	1,355	1.828	237.6	333	2.10
1972/73	1,512	1.885	323.3	390	2.98
1973/74	1,458	1.846	289.4	506	2.15
1974/75	1,148	1.681	168.5	425	1.26
1975/76	1,130	1.511	166.1	508	1.42
1976/77 1/	1,310	1.718	190.2	480	2.20

1/ Forecast.

TABLE 4.--SORGHUM: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1971-76
(ADJUSTED FOR JULY 1 TO JUNE 1 SHIFT IN GRAIN STOCKS REPORTING)

YEAR BEGINNING OCT. 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS SEPT. 30		
					DOMESTIC USE							
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	PRIVATELY HELD	GOVT. 1/	TOTAL
	MILLION BUSHELS											
1971/72	90	876	---	966	692	9	701	123	824	50	92	142
1972/73	142	809	---	951	660	6	666	212	878	60	13	73
1973/74	73	930	---	1,003	701	7	708	234	942	59	2	61
1974/75 2/	61	629	---	690	437	6	443	212	655	35	0	35
1975/76 2/	35	758	---	793	500	6	506	225	731	62	0	62
1976/77 *	62	789	---	851	550 (+,-25)	6	556 (+,-25)	200 (+,-25)	756 (+,-25)	95	0	95 (+,-25)

YEAR BEGINNING OCT. 1	ACREAGE				YIELD	SEASONAL PRICES				GOVT. PRICE SUPPORT OPERATIONS		
						RECEIVED BY FARMERS 3/	KANS. CITY	FT. WORTH	GULF PORTS			
	BASE OR ALLOTMENT	SET-ASIDE	PLANTED	HARVESTED FOR GRAIN	PER HARVESTED ACRE		NO. 2 YELLOW	NO. 2 YELLOW	NO. 2 YELLOW	NATIONAL AVG. LOAN RATE	SUPPORT PAYMENT 4/	TOTAL PAYMENTS TO PARTICIPANTS
	MILLION ACRES				BUSHELS	DOLLARS PER CWT.						MILLION DOLLARS
1971/72	24.6	4.1	20.8	16.3	53.7	1.87	2.05	2.51	2.39	1.73	.31	167
1972/73	23.7	7.3	17.3	13.4	60.5	2.45	3.24	3.75	3.73	1.79	0	289
1973/74	23.9	2.0	19.2	15.9	58.7	3.82	4.64	5.13	5.07	1.79	0	183
1974/75 2/	5/	0	17.7	13.9	45.3	4.96	5.01	5.62	5.45	1.88	0	68 7/
1975/76 2/	5/	0	18.3	15.5	49.0	4.21	4.50 6/	5.01 6/	4.98 6/	1.88	0	20 7/
1976/77 *	5/	0	18.4	14.9	52.9					2.12		

1/ UNDER LOAN TO OR OWNED BY CCC; INCLUDE CCC'S UNCOMMITTED INVENTORY IN 1971 AND 1972; TOTAL INVENTORY IN 1973 TO DATE. 2/ PRELIMINARY. 3/ EXCLUDES SUPPORT PAYMENT. 4/ AVERAGE EARNED ON TOTAL SORGHUM PRODUCED. 5/ AVAILABLE FOR TOTAL FEED GRAINS ONLY. 6/ OCTOBER-AUGUST 1975/76 AVERAGE. 7/ DISASTER PAYMENTS. *ESTIMATE.

TABLE 5.—OATS: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1971-76
(ADJUSTED TO NEW JUNE-MAY MARKETING YEAR)

YEAR BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS MAY 31		
					DOMESTIC USE							
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	PRIVATELY HELD *	GOVT. 1/	TOTAL
	MILLION BUSHELS											
1971/72	571	881	3	1,455	742	95	837	21	858	N.A.	N.A.	597
1972/73	597	692	3	1,292	722	90	812	19	831	N.A.	N.A.	461
1973/74	461	667	2/	1,128	675	88	763	57	820	N.A.	N.A.	308
1974/75	308	614	2/	922	595	84	679	19	698	N.A.	N.A.	224
1975/76 3/	224	657	1	882	576	85	661	14	675	N.A.	N.A.	207
1976/77 **	207	549	---	756	540 (+,-15)	85	625 (+,-15)	10 (+,-5)	635 (+,-15)	N.A.	N.A.	121 (+,-15)

YEAR BEGINNING JUNE 1	ACREAGE				YIELD	SEASONAL PRICES				GOVT. PRICE SUPPORT OPERATIONS		
							MINNEAPOLIS	PORTLAND	CHICAGO			
	BASE OR ALLOTMENT 4/	SET-ASIDE 4/	PLANTED	HARVESTED FOR GRAIN	PER HARVESTED ACRE	RECEIVED BY FARMERS 5/	NO. 2 WHITE, HEAVY	NO. 2 WHITE, HEAVY	NO. 2 WHITE, HEAVY	NATIONAL AVG. LOAN RATE	SUPPORT PAYMENT 4/	TOTAL PAYMENTS TO PARTICIPANTS 4/
	MILLION ACRES				BUSHELS	DOLLARS PER BUSHEL						MILLION DOLLARS
1971/72	---	---	22.0	15.8	55.9	.60	.66	.83	.74	.54	---	---
1972/73	---	---	20.2	13.5	51.2	.72	.80	1.02	.88	.54	---	---
1973/74	---	---	19.1	14.1	47.4	1.18	1.30	1.57	1.40	.54	---	---
1974/75	---	---	18.0	13.2	46.5	1.53	1.68	1.96	1.75	.54	---	---
1975/76 3/	---	---	17.4	13.7	48.1	1.44	1.66	1.86	1.54	.54	---	---
1976/77 **	---	---	17.6	12.7	43.1	1.59 6/	1.81 6/	1.93 6/	1.64 6/	.60		

1/ UNDER LOAN TO OR OWNED BY CCC; NOT AVAILABLE. 2/ LESS THAN 500,000 BUSHELS. 3/ PRELIMINARY. 4/ NOT INCLUDED IN THE PROGRAM. 5/ EXCLUDES SUPPORT PAYMENT. 6/ JUNE-AUGUST 1976 AVERAGE. * NOT AVAILABLE. ** ESTIMATE.

TABLE 6.--BARLEY: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1971-76
(ADJUSTED TO NEW JUNE-MAY MARKETING YEAR)

YEAR BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS MAY 31		
					DOMESTIC USE							
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	PRIVATELY HELD *	GOVT. 1/	TOTAL
						MILLION BUSHELS						
1971/72	184	464	12	660	270	141	411	41	452	N.A.	N.A.	208
1972/73	208	423	17	648	243	143	386	70	456	N.A.	N.A.	192
1973/74	192	422	9	623	239	145	384	93	477	N.A.	N.A.	146
1974/75	146	304	20	470	187	149	336	42	378	N.A.	N.A.	92
1975/76 2/	92	383	16	491	191	149	340	24	364	N.A.	N.A.	127
1976/77 **	127	341	10	478	180 (+,-10)	154	334 (+,-10)	25 (+,-10)	359 (+,-10)	N.A.	N.A.	119 (+,-10)

YEAR BEGINNING JUNE 1	ACREAGE				YIELD	SEASONAL PRICES				GOVT. PRICE SUPPORT OPERATIONS		
							MINNEAPOLIS		FRESNO			
	BASE OR ALLOTMENT	SET-ASIDE	PLANTED	HARVESTED FOR GRAIN	PER HARVESTED ACRE	RECEIVED BY FARMERS 3/	NO. 3 OR BETTER, FEED	NO. 3 OR BETTER, MALTING 4/	NO. 2 WESTERN, FEED	NATIONAL AVG. LOAN RATE	SUPPORT PAYMENT 5/	TOTAL PAYMENTS TO PARTICIPANTS
	MILLION ACRES				BUSHELS	DOLLARS PER BUSHEL						MILLION DOLLARS
1971/72	18.0	0	11.1	10.2	45.7	.99	1.04	1.13	1.49	.86	0	0
1972/73	18.0	4.9	10.6	9.7	43.6	1.21	1.17	1.39	1.68	.86	0	107.2
1973/74	17.3	1.4	11.2	10.5	40.3	2.13	2.03	2.63	2.69	.86	0	77.7
1974/75	6/	0	9.0	8.2	37.2	2.80	2.58	4.03	3.16	.90	0	16.0 7/
1975/76 2/	6/	0	9.5	8.7	44.0	2.42	2.38	3.34	2.80	.90	0	4.9 7/
1976/77 **	6/	0	9.2	8.3	40.8	2.49 8/	2.48 8/	3.33 8/	2.78 8/	1.02		

1/ UNDER LOAN TO OR OWNED BY CCC; NOT AVAILABLE. 2/ PRELIMINARY. 3/ EXCLUDES SUPPORT PAYMENT. 4/ 60% TO 70% PLUMP OR BETTER. 5/ AVERAGE EARNED ON TOTAL BARLEY PRODUCED. 6/ AVAILABLE FOR TOTAL FEED GRAINS ONLY. 7/ DISASTER PAYMENTS. 8/ JUNE-AUGUST 1976 AVERAGE. * NOT AVAILABLE. ** ESTIMATE.

TABLE 7.--FEED GRAINS: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1971-76 1/
(ADJUSTED FOR MARKETING YEARS CHANGED BY JULY 1 TO JUNE 1 SHIFTS IN GRAIN STOCKS REPORTING)

YEAR 2/	SUPPLY				DISAPPEARANCE					ENDING STOCKS		
					DOMESTIC USE							
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	PRIVATELY HELD *	GOVT. 3/	TOTAL
	MILLION SHORT TONS											
1971/72	34.7	207.7	.4	242.8	149.6	16.1	165.7	27.1	192.8	N.A.	N.A.	50.0
1972/73	50.0	199.9	.5	250.4	156.4	17.0	173.4	43.1	216.5	N.A.	N.A.	33.9
1973/74	33.9	205.0	.2	239.1	153.3	17.6	170.9	44.5	215.4	N.A.	N.A.	23.7
1974/75 4/	23.7	165.3	.5	189.5	115.6	17.7	133.3	39.4	172.7	N.A.	N.A.	16.8
1975/76 4/	16.8	202.4	.5	219.7	130.1	18.1	148.2	54.7	202.9	N.A.	N.A.	16.8
1976/77 **	16.8	212.3	.3	229.4	137.5 (+,-7)	18.8	156.3 (+,-7)	49.8 (+,-5)	206.1 (+,-10)	N.A.	N.A.	23.3 (+,-10)

YEAR 2/	ACREAGE				YIELD	SEASONAL INDEX	GOVT. PRICE SUPPORT OPERATIONS
	BASE OR ALLOTMENT	SET-ASIDE	PLANTED	HARVESTED FOR GRAIN	PER HARVESTED ACRE	PRICE RECEIVED BY FARMERS 5/	TOTAL PAYMENTS TO PROGRAM PARTICIPANTS
	- - - - MILLION ACRES - - - -				SHORT TONS	1967=100	MILLION DOLLARS
1971/72	132.9	18.2	128.0	106.3	1.95	96	1,060
1972/73	129.8	36.6	115.1	94.0	2.13	142	1,865
1973/74	130.0	9.4	121.4	102.4	2.00	225	1,171
1974/75 4/	89.0	---	122.5	100.6	1.64	251	328 7/
1975/76 4/	89.0	---	123.1	104.8	1.93	220 6/	114 7/
1976/77 **	89.0	---	129.3	108.1	1.96		

1/ AGGREGATED DATA ON CORN, SORGHUM, OATS AND BARLEY. 2/ THE MARKETING YEAR FOR CORN AND SORGHUM BEGINS OCT. 1; JUNE 1 FOR OATS AND BARLEY. 3/ UNDER LOAN TO OR OWNED BY CCC; NOT AVAILABLE. 4/ PRELIMINARY. 5/ EXCLUDES SUPPORT PAYMENT. 6/ OCTOBER-AUGUST 1975/76 AVERAGE. 7/ DISASTER PAYMENTS. * NOT AVAILABLE. ** ESTIMATE.

TABLE 8.--CORN: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1972-76
(ADJUSTED FOR JULY 1 TO JUNE 1 SHIFT IN GRAIN STOCKS REPORTING)

YEAR AND PERIODS BEGINNING OCT. 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS
					DOMESTIC USE					
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEAR-ANCE	
	MILLION BUSHELS									
1972/73										
OCT.-DEC.	1,126	5,573	1	6,700	1,512	100	1,612	257	1,869	4,831
JAN.-MAR.	4,831	---	1/	4,831	1,082	107	1,189	302	1,491	3,340
APR.-MAY	3,340	---	1/	3,340	634	81	715	186	901	2,439
JUNE-SEPT.	2,439	---	1/	2,439	1,075	141	1,216	514	1,730	709
MKT. YEAR*	1,126	5,573	1	6,700	4,304	429	4,733	1,258	5,991	709
1973/74										
OCT.-DEC.	709	5,647	1	6,357	1,458	106	1,564	320	1,884	4,473
JAN.-MAR.	4,473	---	1/	4,473	1,162	112	1,274	338	1,612	2,861
APR.-MAY	2,861	---	1/	2,861	639	84	723	243	966	1,895
JUNE-SEPT.	1,895	---	1/	1,895	924	146	1,070	342	1,412	483
MKT. YEAR*	709	5,647	1	6,357	4,183	448	4,631	1,243	5,874	483
1974/75 2/										
OCT.-DEC.	483	4,664	1/	5,147	1,148	106	1,254	272	1,526	3,621
JAN.-MAR.	3,621	---	1	3,622	918	111	1,029	379	1,408	2,214
APR.-MAY	2,214	---	1	2,215	458	86	544	179	723	1,492
JUNE-SEPT.	1,492	---	1/	1,492	667	147	814	319	1,133	359
MKT. YEAR*	483	4,664	2	5,149	3,191	450	3,641	1,149	4,790	359
1975/76 2/										
OCT.-DEC.	359	5,767	1	6,127	1,130	112	1,242	454	1,696	4,431
JAN.-MAR.	4,431	---	1	4,432	1,099	115	1,214	406	1,620	2,812
APR.-MAY	2,812	---	1/	2,812	551	85	636	319	955	1,857
JUNE-SEPT.										
MKT. YEAR*	359	5,767	2	6,128	3,650	465	4,115	1,700	5,815	313

1/ LESS THAN 500,000 BUSHELS. 2/ PRELIMINARY. * DATA MAY NOT ADD TO TOTALS DUE TO INDEPENDENT ROUNDING.

TABLE 9.--SORGHUM: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1972-76
(ADJUSTED FOR JULY 1 TO JUNE 1 SHIFT IN GRAIN STOCKS REPORTING)

YEAR AND PERIODS BEGINNING OCT. 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS
					DOMESTIC USE					
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	
	MILLION BUSHELS									
1972/73										
OCT.-DEC.	142	809	---	951	282	1	283	47	330	621
JAN.-MAR.	621	---	---	621	199	1	200	58	258	363
APR.-MAY	363	---	---	363	80	2	82	28	110	253
JUNE-SEPT.	253	---	---	253	99	2	101	79	180	73
MKT. YEAR*	142	809	---	951	660	6	666	212	878	73
1973/74										
OCT.-DEC.	73	930	---	1,003	301	1	302	56	358	645
JAN.-MAR.	645	---	---	645	197	1	198	66	264	381
APR.-MAY	381	---	---	381	99	2	101	35	136	245
JUNE-SEPT.	245	---	---	245	104	3	107	77	184	61
MKT. YEAR*	73	930	---	1,003	701	7	708	234	942	61
1974/75 1/										
OCT.-DEC.	61	629	---	690	262	1	263	46	309	381
JAN.-MAR.	381	---	---	381	108	1	109	63	172	209
APR.-MAY	209	---	---	209	59	2	61	17	78	131
JUNE-SEPT.	131	---	---	131	8	2	10	86	96	35
MKT. YEAR*	61	629	---	690	437	6	443	212	655	35
1975/76 1/										
OCT.-DEC.	35	758	---	793	255	1	256	63	319	474
JAN.-MAR.	474	---	---	474	157	1	158	68	226	248
APR.-MAY	248	---	---	248	71	2	73	21	94	154
JUNE-SEPT.										
MKT. YEAR*	35	758	---	793	500	6	506	225	731	62

1/ PRELIMINARY. * DATA MAY NOT ADD TO TOTALS DUE TO INDEPENDENT ROUNDING.

TABLE 10--OATS AND BARLEY: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1972-76
(ADJUSTED TO NEW JUNE-MAY MARKETING YEAR)

YEAR AND PERIODS BEGINNING JULY 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	DOMESTIC USE: FEED	DOMESTIC USE: FOOD, INDUSTRY AND SEED	DOMESTIC USE: TOTAL	EXPORTS	TOTAL DISAPPEARANCE	
					OATS MILLION BUSHELS					
1972/73										
JUNE-SEPT.	597	692	2	1,291	339	17	356	7	363	928
OCT.-DEC.	928	---	1	929	138	13	151	2	153	776
JAN.-MAR.	776	---	1	777	171	20	191	2	193	584
APR.-MAY	584	---	1/	584	74	40	114	9	123	461
MKT. YEAR*	597	692	3	1,292	722	90	812	19	831	461
1973/74										
JUNE-SEPT.	461	667	1/	1,128	281	16	297	23	320	808
OCT.-DEC.	808	---	1/	808	139	13	152	19	171	637
JAN.-MAR.	637	---	1/	637	180	20	200	1	201	436
APR.-MAY	436	---	1/	436	76	39	115	13	128	308
MKT. YEAR*	461	667	1/	1,128	675	88	763	57	820	308
1974/75										
JUNE-SEPT.	308	614	1/	922	248	15	263	12	275	647
OCT.-DEC.	647	---	1/	647	124	12	136	4	140	507
JAN.-MAR.	507	---	1/	507	161	19	180	1	181	326
APR.-MAY	326	---	1/	326	61	38	99	3	102	224
MKT. YEAR*	308	614	1/	922	595	84	679	19	698	224
1975/76 2/										
JUNE-SEPT.	224	657	1/	881	235	16	251	3	254	627
OCT.-DEC.	627	---	1/	627	105	13	118	8	126	501
JAN.-MAR.	501	---	1/	501	159	19	178	1	179	322
APR.-MAY	322	---	1/	322	75	38	113	2	115	207
MKT. YEAR*	224	657	1	882	576	85	661	14	675	207
					BARLEY MILLION BUSHELS					
1972/73										
JUNE-SEPT.	206	423	7	638	115	45	160	24	184	454
OCT.-DEC.	454	---	7	461	57	29	86	13	99	362
JAN.-MAR.	362	---	1/	362	54	34	88	16	104	258
APR.-MAY	258	---	3	261	18	33	51	18	69	192
MKT. YEAR*	208	423	17	648	244	142	386	70	456	192
1973/74										
JUNE-SEPT.	192	422	3	617	111	46	157	38	195	422
OCT.-DEC.	422	---	4	426	50	32	82	23	105	321
JAN.MAR.	321	---	1	322	54	35	89	18	107	215
APR.-MAY	215	---	1	216	24	32	56	14	70	146
MKT. YEAR*	192	422	9	623	239	145	384	93	477	146
1974/75										
JUNE-SEPT.	146	304	8	458	93	51	144	11	155	303
OCT.-DEC.	303	---	6	309	36	31	67	14	81	228
JAN.-MAR.	228	---	3	231	51	34	85	12	97	134
APR.-MAY	134	---	4	138	9	32	41	5	46	92
MKT. YEAR*	146	304	20	470	187	149	336	42	378	92
1975/76 2/										
JUNE-SEPT.	92	383	7	482	85	50	135	4	140	342
OCT.-DEC.	342	---	5	347	28	32	60	10	70	277
JAN.-MAR.	277	---	3	280	58	33	91	4	95	185
APR.-MAY	185	---	2	187	21	33	54	6	60	127
MKT. YEAR*	92	383	16	491	191	149	340	24	364	127

1/ LESS THAN 500,000 BUSHELS. 2/ PRELIMINARY. * DATA MAY NOT ADD TO TOTALS DUE TO INDEPENDENT ROUNDING.

TABLE 11.—FEED GRAINS: FEED YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1972-76 1/ (ADJUSTED FOR JULY 1 TO JUNE 1 SHIFT IN GRAIN STOCKS REPORTING)

YEAR AND PERIODS BEGINNING OCT. 1	SUPPLY				DISAPPEARANCE					ENDING STOCKS
					DOMESTIC USE					
	BEGINNING STOCKS	PRODUCTION	IMPORTS	TOTAL	FEED	FOOD, INDUSTRY AND SEED	TOTAL	EXPORTS	TOTAL DISAPPEARANCE	
	MILLION TONS									
1972/73										
OCT.-DEC.	61.2	178.7 2/	.2	240.1	53.7	3.7	57.4	8.9	66.3	173.8
JAN.-MAR.	173.8	---	3/	173.8	39.9	4.2	44.1	10.5	54.6	119.2
APR.-MAY	119.2	---	.1	119.3	21.5	3.8	25.3	6.6	31.9	87.4
JUNE-SEPT.	87.4	20.8 4/	.1	108.3	40.1	5.4	45.5	17.9	63.4	44.9
1973/74										
OCT.-DEC.	44.9	184.2 2/	.1	229.2	52.6	4.0	56.6	11.4	68.0	161.2
JAN.-MAR.	161.2	---	3/	161.2	42.2	4.3	46.5	11.8	58.3	102.9
APR.-MAY	102.9	---	3/	102.9	22.4	3.8	26.2	8.3	34.5	68.4
JUNE-SEPT.	68.4	17.1 4/	.2	85.7	35.0	5.6	40.6	12.2	52.8	32.9
1974/75 5/										
OCT.-DEC.	32.9	148.2 2/	.1	181.2	42.4	3.9	46.3	9.3	55.6	125.6
JAN.-MAR.	125.6	---	.1	125.7	32.5	4.3	36.8	12.7	49.5	76.2
APR.-MAY	76.2	---	.1	76.3	15.6	3.8	19.4	5.7	25.1	51.2
JUNE-SEPT.	51.2	19.7 4/	.2	71.1	24.7	5.6	30.3	11.5	41.8	29.3
1975/76 5/										
OCT.-DEC.	29.3	182.7 2/	.1	212.1	41.2	4.1	45.3	14.8	60.1	152.0
JAN.-MAR.	152.0	---	.1	152.1	39.1	4.3	43.4	13.4	56.8	95.3
APR.-MAY	95.3	---	2/	95.3	19.3	3.6	22.9	9.7	32.6	62.7
JUNE-SEPT.										

1/ AGGREGATED DATA ON CORN, SORGHUM, OATS AND BARLEY. 2/ CORN AND SORGHUM. 3/ LESS THAN 50,000 TONS. 4/ OATS AND BARLEY. 5/ PRELIMINARY.

Table 12.--Coarse grains and wheat: Production and trade, selected world areas (July-June) 1974/75 - 1976/77

Country	1974/75			1975/76 Preliminary			1976/77 Projected		
	Coarse grain 1/	Wheat	Total	Coarse grain 1/	Wheat	Total	Coarse grain 1/	Wheat	Total
				- - - - Million metric tons - - - -					
Production									
Canada	17.4	13.3	30.7	19.8	17.1	36.9	20.0	20.0	40.0
Australia	4.5	11.4	15.9	5.7	12.0	17.7	5.6	8.0	13.6
Argentina	13.8	6.0	19.8	12.1	8.6	20.7	14.9	10.0	24.9
South Africa	9.7	1.6	11.3	8.2	1.8	10.0	9.7	1.8	11.5
Thailand	2.7	---	2.7	3.3	---	3.3	3.0	---	3.0
Brazil	15.6	2.8	18.4	18.0	1.6	19.6	19.3	4.3	23.6
W. Europe	85.4	56.7	142.1	81.8	48.6	130.4	74.4	50.5	124.9
USSR*	99.7	83.8	183.5	65.7	66.1	131.8	101.0	80.0	181.0
E. Europe	56.9	34.2	91.1	59.8	29.1	88.9	57.8	32.5	90.3
Others	163.5	97.9	261.4	172.4	106.3	278.7	174.8	113.6	288.4
Total Foreign	469.2	307.7	776.9	446.8	291.2	738.0	480.5	320.7	801.2
Exports									
Canada	2.8	11.2	14.0	4.4	11.6	16.0	3.5	12.0	15.5
Australia	2.9	8.2	11.1	3.4	8.0	11.4	3.6	7.6	11.2
Argentina	8.5	2.2	10.7	5.2	3.2	8.4	4.9	4.2	9.1
South Africa	3.5	---	3.5	3.4	---	3.4	2.0	---	2.0
Thailand	2.2	---	2.2	2.6	---	2.6	2.2	---	2.2
Brazil	1.5	---	1.5	1.2	---	1.2	2.4	---	2.4
W. Europe	4.7	8.5	13.2	3.3	8.7	12.0	0.2	6.0	6.2
USSR	1.0	4.0	5.0	0.0	0.5	0.5	1.0	1.0	2.0
All Others	2.4	2.0	4.4	4.9	1.5	6.4	3.5	2.7	6.2
USA 2/	34.2	28.0	62.2	46.3	31.5	77.8	45.6	28.3	73.9
World Total	63.7	64.1	127.8	74.7	65.0	139.7	68.9	61.8	130.7
Imports									
W. Europe	26.5	6.1	32.6	25.6	7.3	32.9	31.2	6.5	37.7
From USA	16.3	2.6	18.9	18.3	4.1	22.4			
Japan	13.1	5.4	18.5	13.5	5.7	19.2	14.2	5.6	19.8
From USA	7.2	3.1	10.3	8.0	3.3	11.3			
USSR	2.7	2.5	5.2	15.5	10.1	25.6	6.0	9.0	15.0
From USA	1.3	1.0	2.3	9.9	4.0	13.7			
E. Europe	6.4	4.7	11.1	7.2	4.8	12.0	6.8	4.5	11.3
From USA	2.0	0.1	2.1	2.7	0.9	3.6			
All Others	15.1	45.4	60.5	13.1	38.0	51.1	10.7	36.2	46.9
From USA	7.4	21.2	28.6	7.4	19.2	26.6			
World Total	63.8	64.1	127.9	74.9	65.9	140.8	68.9	61.8	130.7
From USA	34.2	28.0	62.2	46.3	31.5	77.8			

1/ Includes corn, barley, oats, sorghum, and rye, excluding products. 2/ U.S. supply-use estimates are midpoints of the official range estimates. Source: Adapted from Foreign Agricultural Service, World Grain Situation: 1976/77 Crop Developments, FG 17-76, August 3, 1976.

*Excludes pulses and other miscellaneous grains which generally range between 8 and 12 million metric tons.

Table 13.--U.S. corn exports to selected countries, 1971-75
(Grain only)

Region and country	Year beginning October					
	1971/72	1972/73	1973/74	1974/75	October-June	
					1974/75	1975/76
	- - - - Million bushels - - - -					
Western Hemisphere						
Canada	10	1/31	51	37	20	18
Chile	8	6	5	2	2	0
Costa Rica	---	2	2	2/	2/	---
Mexico	1	35	48	48	46	33
Surinam	---	1	1	1	2/	1
Dominican Republic	---	1	2	1	2/	2
El Salvador	---	3	2/	1	1	2/
Peru	3	10	7	11	11	10
Jamaica	4	5	4	5	3	1
Trinidad & Tobago	3	3	2	2	2	2
Western Europe						
EC						
Belgium-Luxembourg	15	17	5	13	10	19
France	2/	1	2/	2	2	3
Germany, West	56	82	122	115	91	141
Italy	91	113	85	107	73	70
Netherlands	103	149	137	154	123	107
Ireland	1	5	2/	---	---	---
United Kingdom	54	65	38	27	21	33
Denmark	2/	2/	7	2/	2/	---
Other West Europe						
Spain	38	69	101	104	94	55
Greece	7	22	35	20	17	21
Portugal	18	19	22	41	33	32
Norway	2	4	3	3	3	4
Switzerland	---	2/	1	2	1	1
Eastern Europe						
Czechoslovakia	3	1	1	0	0	6
Germany, East	12	---	6	2/	2/	3
Poland	11	24	19	28	21	63
Romania	7	3	8	30	28	1
Yugoslavia	16	2	2	---	---	---
USSR	136	132	129	40	36	362
Asia						
China, People's Republic of	0	49	59	0	0	---
Japan	111	252	251	206	140	161
Korea, South	17	17	15	14	12	22
Taiwan	9	23	12	16	10	24
Israel	3	6	7	9	6	8
India	1	2/	2/	0	0	---
Philippines	6	2	4	2	2	4
Iran	1	5	2	4	4	2
Lebanon	5	3	3	6	4	2
Africa						
Egypt	5	6	16	19	17	13
Canary Islands	4	4	3	4	2	3
Tanzania	4	2/	4	9	8	2/
Other	21	70	7	42	50	94
World Total	786	1,242	1,226	1,125	893	1,321

1/ For consumption within the country February and March 1973 imports estimated.
2/ Less than 500,000 bushels.

Table 14.--Corn, No. 2 Yellow, Chicago: Daily closing cash and December 1976 futures 1/
(Dollars per bushel)

March			April			May			June			July			August		
Date	Cash	Dec. '76 Futures	Date	Cash	Dec. '76 Futures	Date	Cash	Dec. '76 Futures	Date	Cash	Dec. '76 Futures	Date	Cash	Dec. '76 Futures	Date	Cash	Dec. '76 Futures
1	2.73	2.76	1	2.64	2.61	3	2.73	2.64	1	2.92	2.74	1	2.93	2.83	2	2.84	2.64
2	2.69	2.69	2	2.65	2.62	4	2.73	2.64	2	2.93	2.72	2	2.95	2.87	3	2.86	2.67
3	2.69	2.71	5	2.66	2.63	5	2.74	2.64	3	2.96	2.72	5	HOLIDAY		4	2.89	2.71
4	2.71	2.72	6	2.67	2.64	6	2.74	2.65	4	2.97	2.74	6	3.05	2.97	5	2.89	2.72
5	2.72	2.72	7	2.67	2.63	7	2.78	2.65	7	3.06	2.84	7	2.95	2.87	6	2.87	2.70
8	2.71	2.69	8	2.68	2.66	10	2.79	2.65	8	3.01	2.84	8	2.99	2.89	9	2.84	2.67
9	2.71	2.71	9	2.66	2.65	11	2.80	2.66	9	3.06	2.88	9	3.00	2.88	10	2.83	2.68
10	2.72	2.70	12	2.66	2.66	12	2.80	2.68	10	3.08	2.90	12	2.96	2.85	11	2.81	2.66
11	2.71	2.67	13	2.65	2.63	13	2.88	---	11	3.03	2.84	13	2.99	2.85	12	2.76	2.68
12	2.70	2.66	14	2.65	2.66	14	2.90	2.70	14	2.99	2.84	14	3.12	2.95	13	2.84	2.76
15	2.69	2.63	15	2.68	2.67	17	2.87	2.68	15	2.94	2.79	15	3.04	2.90	16	2.83	2.74
16	2.66	2.62	16	HOLIDAY		18	2.85	2.66	16	2.93	2.81	16	3.03	2.88	17	2.78	2.69
17	2.66	2.65	19	2.67	2.66	19	2.83	2.65	17	2.86	2.78	19	2.97	2.82	18	2.83	2.73
18	2.71	2.66	20	2.68	2.67	20	2.85	2.64	18	2.84	2.78	20	3.00	2.85	19	2.86	2.78
19	2.70	2.65	21	2.68	2.67	21	2.88	2.64	21	2.95	2.87	21	2.97	2.82	20	2.83	2.77
22	2.71	2.66	22	2.69	2.68	24	2.94	2.68	22	2.99	2.88	22	2.85	2.72	23	2.88	2.82
23	2.66	2.63	23	2.68	2.66	25	2.93	2.69	23	2.91	2.82	23	2.90	2.76	24	2.87	2.80
24	2.65	2.64	26	2.68	2.65	26	2.93	2.75	24	2.94	2.86	26	2.86	2.70	25	2.82	2.77
25	2.64	2.63	27	2.68	2.63	27	2.94	2.75	25	2.97	2.84	27	2.88	2.69	26	2.79	2.79
26	2.63	2.63	28	2.72	2.65	28	2.90	2.72	28	2.95	2.83	28	2.89	2.69	27	2.83	2.83
29	2.63	2.61	29	2.70	2.63	31	HOLIDAY		29	2.89	2.79	29	2.90	2.68	30	2.79	2.79
30	2.65	2.63	30	2.71	2.73				30	2.85	2.75	30	2.88	2.68	31		
31	2.64																

1/ Continued from May 1976 Feed Situation, FdS-261.

Table 15.--Cash prices at principal markets, 1972-76

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Simple average
							Dollars						
							CORN, No. 2 Yellow, Chicago (per bushel)						
1972	1.32	1.33	1.57	1.58	1.59	1.59	1.65	2.01	2.42	2.52	2.91	2.47	1.91
1973	2.37	2.50	2.68	2.90	3.13	2.99	2.69	2.70	2.93	3.35	3.63	3.55	2.95
1974	3.74	3.48	3.47	3.19	2.96	2.90	2.96	2.82	2.89	2.95	3.12	2.99	3.12
1975	2.74	2.59	2.59	2.62	2.70	2.68	2.68	2.84	2.96	2.96	2/2.84		
							CORN, No. 2 Yellow, Omaha (per bushel)						
1972	1.28	1.34	1.49	1.50	1.55	1.49	1.51	1.84	2.25	2.32	2.71	2.37	1.80
1973	2.34	2.40	2.49	2.71	2.95	2.76	2.49	2.51	2.68	3.19	3.55	3.46	2.79
1974	3.63	3.46	3.36	3.07	2.79	2.75	2.85	2.81	2.84	2.92	3.12	2.95	3.05
1975	2.75	2.55	2.56	2.57	2.60	2.62	2.59	2.74	2.86	2.83	2/2.68		
							SORGHUM, No. 2 Yellow, Kansas City (per cwt.)						
1972	2.17	2.42	2.88	3.06	2.88	2.86	2.83	3.09	3.61	3.93	4.72	4.37	3.24
1973	4.37	4.31	4.37	4.71	4.99	4.64	4.03	3.84	3.99	5.02	5.79	5.64	4.64
1974	6.32	6.10	5.36	4.95	4.55	4.48	4.64	4.60	4.53	4.82	5.13	4.66	5.01
1975	4.53	4.36	4.33	4.36	4.47	4.62	4.47	4.49	4.66	4.73	2/4.30		

Year beginning June	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
							Dollars per bushel						
							OATS, No. 2 Extra Heavy White, Minneapolis						
1972	.70	.69	.70	.71	.76	.81	.91	.88	.84	.84	.86	.91	.80
1973	.93	.93	1.28	1.32	1.26	1.25	1.32	1.55	1.66	1.52	1.26	1.35	1.30
1974	1.43	1.63	1.68	1.71	1.87	1.80	1.74	1.64	1.64	1.49	1.72	1.78	1.68
1975	1.59	1.59	1.70	1.68	1/1.64	1.69	1.65	1.67	1.66	1.64	1.67	1.72	1.66
1976	1.93	1.84	2/1.66										
							BARLEY, No. 3 or Better, Feed, Minneapolis						
1972	1.05	.96	.98	1.11	1.16	1.14	1.27	1.34	1.20	1.19	1.25	1.36	1.17
1973	1.51	1.67	2.12	2.12	2.02	1.80	2.12	2.34	2.51	2.32	1.74	2.10	2.03
1974	2.36	2.36	2.69	2.48	3.07	3.17	2.89	2.82	2.59	2.26	2.24	2.05	2.58
1975	1.67	2.04	2.77	3.00	2.83	2.42	2.23	2.11	2.26	2.36	2.39	2.50	2.38
1976	2.52	2.45	2/2.46										
							BARLEY, No. 3 or Better Malting 70% or Better Plump, Minneapolis						
1972	1.22	1.22	1.21	1.26	1.34	1.34	1.45	1.59	1.58	1.61	1.64	1.66	1.43
1973	1.74	1.82	2.45	2.64	2.64	2.62	2.64	2.76	3.27	3.57	2.98	2.94	2.67
1974	3.11	3.38	3.77	4.00	4.42	4.78	4.65	4.62	4.45	4.15	4.34	4.28	4.16
1975	3.97	3.83	3.65	3.93	3.83	3.56	3.35	3.24	3.21	3.22	3.17	3.22	3.52
1976	3.55	3.59	2/3.37										

1/ Beginning October 1975 heavy white. 2/ Preliminary.

Source: Grain Market News, AMS, USDA.

Table 16.--Average price received by farmers, United States, by months, 1972-76

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average weighted by sales 1/
	---- Dollars ----												
	CORN, per bushel												
1972	1.19	1.20	1.42	1.39	1.35	1.37	1.42	1.61	1.99	2.03	2.68	2.15	1.57
1973	2.17	2.18	2.39	2.59	2.76	2.68	2.41	2.45	2.57	2.91	3.37	3.30	2.55
1974	3.45	3.32	3.27	3.07	2.86	2.67	2.68	2.66	2.68	2.72	2.95	2.76	3.03
1975	2.62	2.33	2.37	2.44	2.40	2.50	2.46	2.61	2.74	2.82	2.64		2/2.55
	SORGHUM, per 100 pounds												
1972	2.09	2.19	2.72	2.72	2.60	2.60	2.56	2.66	3.10	3.46	3.64	3.87	2.45
1973	3.65	3.66	3.83	4.03	4.38	4.25	3.78	3.59	3.59	4.15	5.07	5.30	3.82
1974	5.78	5.85	5.33	4.96	4.21	4.03	4.15	4.21	4.15	4.25	4.69	4.56	4.96
1975	4.43	4.05	4.00	4.06	4.09	4.13	4.13	4.14	4.29	4.53	4.03		2/4.21

Year beginning June	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average weighted by sales 1/
	---- Dollars per bushel ----												
	OATS												
1972	.666	.655	.623	.645	.671	.700	.806	.811	.776	.771	.774	.796	.725
1973	.904	.855	1.13	1.09	1.14	1.13	1.20	1.32	1.44	1.40	1.24	1.27	1.18
1974	1.30	1.37	1.55	1.57	1.68	1.70	1.70	1.62	1.58	1.46	1.51	1.54	1.53
1975	1.49	1.45	1.44	1.45	1.41	1.40	1.42	1.44	1.46	1.46	1.44	1.47	2/1.44
1976	1.64	1.64	1.48										
	BARLEY												
1972	1.09	1.04	.957	1.07	1.17	1.21	1.32	1.42	1.34	1.31	1.31	1.39	1.21
1973	1.55	1.58	2.10	2.16	2.23	2.10	2.19	2.32	2.52	2.61	2.15	2.19	2.13
1974	2.25	2.33	2.78	2.86	3.11	3.41	3.30	3.17	2.89	2.55	2.72	2.75	2.80
1975	2.30	2.35	2.56	2.69	2.68	2.43	2.35	2.31	2.31	2.34	2.31	2.41	2/2.42
1976	2.60	2.51	2.48										

Year beginning May	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Average weighted by sales
	---- Dollars per ton ----												
	HAY												
1972	31.10	30.90	28.50	29.30	29.80	30.30	31.00	33.00	34.60	35.40	35.40	33.90	31.30
1973	37.50	35.20	36.30	39.00	43.10	46.20	46.80	46.00	47.10	47.10	45.40	44.40	41.60
1974	54.00	47.70	48.20	51.10	51.90	51.50	50.30	50.70	50.10	49.30	49.70	52.40	50.90
1975	56.30	53.60	51.20	51.00	50.80	50.30	50.20	51.60	52.70	54.30	54.10	54.10	2/53.00
1976	64.80	59.60	59.00	58.70									

1/ Includes an allowance for unredeemed loans and purchase agreement deliveries valued at the average loan rate, by States; excludes government payments.

2/ Preliminary.

Table 17.--Livestock, poultry and milk-feed price ratios, by months, 1971-76

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average
HOG/CORN, U.S. Basis 1/													
1971	19.5	19.3	18.2	20.9	23.5	21.2	19.9	21.7	22.7	24.1	24.3	23.0	21.5
1972	23.0	22.3	20.8	22.3	25.4	27.9	24.7	21.9	18.7	20.3	21.0	20.4	22.4
1973	18.8	18.6	16.0	15.5	14.2	13.1	12.7	10.7	9.4	11.8	10.7	10.2	13.5
1974 2/	10.8	11.1	11.7	12.4	13.5	14.6	14.7	17.0	17.7	19.8	19.0	21.2	15.3
1975 2/	22.3	21.4	20.0	19.5	19.3	18.2	19.1	18.2	17.9	16.9	16.1		
BEEF-STEER/CORN, Omaha 3/													
1971	28.3	29.0	27.6	28.5	29.5	28.6	27.6	28.1	30.8	31.0	29.5	27.1	28.8
1972	27.3	25.1	24.7	27.1	28.1	30.6	29.8	24.9	20.8	20.5	19.5	19.0	24.8
1973	17.9	16.7	15.8	17.4	15.7	15.5	16.7	16.1	14.2	13.7	13.1	12.0	15.4
1974 2/	10.9	10.9	11.1	11.8	12.5	13.1	15.0	17.6	18.2	17.2	15.0	16.6	14.2
1975 2/	17.4	17.7	17.6	16.0	14.9	13.8	16.6	14.8	14.2	13.4	13.8		
MILK/FEED, U.S. Basis 4/													
1971	1.84	1.88	1.85	1.82	1.81	1.78	1.72	1.69	1.66	1.68	1.72	1.75	1.77
1972	1.77	1.75	1.64	1.59	1.58	1.52	1.51	1.40	1.26	1.35	1.27	1.51	1.51
1973	1.57	1.62	1.57	1.53	1.51	1.49	1.50	1.45	1.37	1.30	1.16	1.22	1.44
1974 2/	1.21	1.23	1.20	1.25	1.29	1.33	1.30	1.30	1.30	1.34	1.36	1.47	1.30
1975 2/	1.56	1.67	1.70	1.75	1.66	1.64	1.60	1.51	1.42	1.42	1.51		
EGG/FEED, U.S. Basis 5/													
1971	6.9	7.2	8.2	7.1	7.0	7.6	6.5	6.4	6.4	7.0	6.9	7.7	7.1
1972	6.9	8.0	8.7	9.0	7.3	7.7	7.9	6.9	6.4	7.1	8.3	8.6	7.7
1973	8.2	8.6	8.5	8.8	8.4	7.5	7.0	6.2	5.8	6.2	5.7	6.7	7.3
1974 2/	6.5	6.6	7.2	7.2	7.2	7.6	6.5	6.5	6.3	6.4	6.8	7.5	6.9
1975 2/	7.1	8.1	9.0	8.7	8.4	7.5	7.4	7.6	6.9	6.9	7.7		
BROILER/FEED, U.S. Basis 6/													
1971	2.7	2.7	2.5	2.8	3.1	3.1	2.7	2.8	3.0	3.3	3.0	3.2	2.9
1972	2.9	2.7	2.6	2.9	3.1	3.5	3.9	3.3	2.9	3.4	4.0	3.5	3.2
1973	2.9	2.5	2.3	2.5	2.8	2.7	2.7	2.7	2.5	2.6	2.3	2.6	2.6
1974 2/	2.5	2.6	2.4	2.7	2.9	2.9	2.8	3.1	3.4	3.7	3.6	3.6	3.0
1975 2/	3.5	3.4	3.0	3.1	3.2	3.0	3.0	3.1	2.8	2.8	2.7		
TURKEY/FEED, U.S. Basis 7/													
1971	4.7	4.8	5.1	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.6
1972	4.3	4.5	4.4	4.0	3.7	4.1	4.8	4.2	3.8	3.9	4.3	4.9	4.2
1973	5.0	5.3	4.8	4.0	3.8	3.8	3.4	3.2	3.1	2.9	2.9	3.0	3.8
1974 2/	3.0	3.3	3.6	3.6	3.7	3.8	3.6	3.8	3.9	4.2	4.2	4.2	3.7
1975 2/	4.2	4.5	4.4	4.1	3.9	3.9	3.9	3.9	3.5	3.3	3.4		

1/ Number bushels of corn equal in value to 100 lbs. of hog liveweight. 2/ Preliminary. 3/ Based on price of beef-steers 900-1,100 pounds, choice instead of average grade all steers previously published. 4/ Pounds concentrate ration equal in value to one lb. whole milk. 5/ Number of lbs. of laying feed equal in value to one dozen eggs. 6/ Number of lbs. of broiler grower feed equal in value to one lb. broiler liveweight. 7/ Pounds of turkey grower feed equal in value to one lb. turkey liveweight.

Table 18.--Market trends, selected feeds and corn products

Item	Unit	1974/75 Season	1975/76 Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season
WHOLESALE, MOSTLY BULK 1/															
Soybean meal, 44%, solvent, Decatur	$ per ton	131	126	120	125	128	133	128	127	152	188	194	171		
Soybean meal, 49-50%, solvent, Decatur	"	142	136	127	132	136	139	136	136	162	200	208	184		
Cottonseed meal, 41%, expeller, Memphis	"	120	132	128	140	136	125	128	130	144	182	185	168		
Linseed meal, 34%, solvent, Minneapolis	"	127	118	119	132	125	119	118	123	148	157	157	148		
Peanut meal, 50%, S.E. mills	"	129	139	134	133	126	124	129	130	148	174	200	186		
Meat meal, 50%, Chicago	"	149	147	139	148	154	153	152	154	193	246	226	176		
Tankage digester, 60%, Chicago	"	160	157	149	158	164	163	162	164	202	256	236	186		
Fishmeal, 65%, domestic, East Coast	"	251	269	270	267	271	272	279	270	282	352	384	360		
Gluten feed, 21%, Chicago	"	88	90	86	88	93	87	83	82	90	98	106	107		
Gluten meal, 60%, Chicago	"	209	238	238	241	248	254	251	208	186	209	257	268		
Brewers' dried grains, 24%, Milwaukee	"	91	99	93	89	104	93	96	85	88	97	101	105		
Distillers' dried grains, 28%, Cinn.	"	117	122	110	98	108	114	108	102	102	110	123	127		
Feather meal, Jackson, Mississippi	"	172	170	191	187	189	190	187	185	188	230	245	218		
Wheat bran, Kansas City	"	86	89	91	92	90	82	81	82	84	88	90	87		
Wheat middlings, Kansas City	"	86	89	91	92	90	87	81	82	84	88	90	87		
Rice bran, Arkansas	"	76	75	80	91	95	76	71	65	62	75	85	72		
Hominy feed, Chicago	"	91	83	81	82	83	81	77	75	86	94	91	90		
Alfalfa meal, 17%, dehy., Kansas City	"	81	87	92	99	110	108	111	108	91	94	100	101		
Blackstrap molasses, New Orleans	"	52	36	37	46	53	54	53	52	45	47	48	50		
Molasses beet pulp, Los Angeles	"	107	116	111	109	108	108	107	101	101	101	103	104		
Animal fat, Chicago	¢ per lb.	12.2	13.8	13.8	13.2	13.5	13.5	14.0	13.4	13.5	13.8	14.4	13.5		
Urea, 42%, N., Fort Worth	$ per ton	200	185	158	158	158	158	158	161	142	142	142	142		
Corn, No. 2, white, Kansas City	$ per bu.	4.10	2.94	2.72	2.74	2.66	2.68	2.93	2.91	3.00	3.32	3.39	2.86		
PRICES PAID, U.S. BASIS 2/															
Soybean meal, 44%	$ per cwt.	9.33	9.23	8.75	8.74	8.81	8.84	8.86	8.84	9.34	11.50	12.50	11.70		
Cottonseed meal, 41%	"	9.29	9.44	9.31	9.37	9.47	9.42	9.47	9.48	9.60	10.40	11.40	11.40		
Wheat bran	"	7.42	7.20	7.17	7.26	7.36	7.37	7.38	7.35	7.41	7.44	7.60	7.51		
Wheat middlings	"	7.30	7.12	7.11	7.18	7.25	7.26	7.26	7.19	7.24	7.31	7.46	7.38		
Broiler grower feed	$ per ton	169	164	158	160	158	160	160	159	161	172	181	177		
Laying feed	"	153	148	143	143	143	143	145	144	146	156	162	158		
Turkey grower feed	"	172	170	164	165	165	165	165	162	165	178	187	181		
Chick starter	"	172	167	160	161	161	162	162	161	164	179	187	183		
Dairy feed, 16%	"	138	136	133	134	136	136	136	135	137	143	145	144		
Beef cattle feed, 30% and over 3/	$ per cwt.	8.21	8.19	8.04	8.15	8.14	8.12	8.09	8.09	8.15	8.80	9.20	8.96		
Hog feed, over 29% 4/	"	10.43	10.50	10.00	10.10	10.20	10.30	10.30	10.30	10.70	12.50	13.50	12.50		
Alfalfa hay, baled	$ per ton	66	65	67	67	68	70	73	73	72	71	71	71		
Stock salt	$ per cwt.	2.77	---	2.90	---	---	---	3.03	---	---	---	3.12	---		
CORN PRODUCTS, WHOLESALE 5/															
Corn meal, New York															
White	$ per cwt.	15.47	15.00	14.75	13.70	13.00	13.00	13.00	12.40	12.12	12.12	12.38	12.25		
Yellow	"	9.72	9.42	9.12	8.94	8.75	8.91	9.17	9.35	9.64	9.90	10.02	9.77		
Grits (brewers) New York	"	9.26	8.77	8.28	8.17	7.94	8.04	8.46	8.76	8.95	9.14	9.20	8.98		
Syrup, Chicago West	¢ per lb.	12.85	13.21	12.62	10.70	10.29	10.29	10.22	10.26	10.26	10.26	10.21	9.77		
Sugar (dextrose), Chicago West	"	20.75	16.55	16.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	14.75		
High-fructose (dry weight tank car) Chicago west	"	25.75	17.47	16.45	15.87	15.77	15.68	15.66	15.35	15.22	15.22	15.22	14.07		

1/ Feed Market News, AMS, USDA, except urea which is from Feedstuffs, Miller Publishing Co., Minneapolis, Minnesota. 2/ Agricultural Prices, SRS, USDA. 3/ Now 32-36%. 4/ Now 38-42%. 5/ Milling and Baking News, Kansas City, Mo.

Table 19.--The soybean meal situation

Month	SOYBEANS											
	Crush			Exports			Stocks at processor's (end of month)			Prices, monthly average, No. 1 yellow, Decatur		
	Cumulative											
	1974/75	1975/76 1/	1976/77 proj.	1974/75	1975/76 1/	1976/77 proj.	1974/75	1975/76 1/	1976/77 proj.	1974/75	1975/76 1/	1976/77
	Million bushels									Dol. per bu.		
October	62	71		32	63		94	117		8.30	4.90	
November	122	142		95	125		123	137		7.54	4.74	
December	183	220		136	175		102	131		7.23	4.60	
January	246	295		186	227		83	121		6.38	4.66	
February	300	364		219	279		79	110		5.69	4.77	
March	361	442		257	331		65	101		5.60	4.71	
April	418	520		293	382		55	93		5.55	4.75	
May	471	599		318	432		44	79		5.23	5.23	
June	524	674		332	479		38	81		5.16	6.23	
July	584	745		363	508		35	66		5.60	6.66	
August	648			396			27			6.02	6.27	
September	701			421			27			5.57		
Season Total	701	865	800 ±30	421	565	540 ±30	2/185	2/200	2/120 ±50	6.16		

Month	SOYBEAN MEAL											
	Production			Domestic use 3/			Exports			Prices, monthly average, 44% Decatur		
	Cumulative											
	1974/75	1975/76 1/	1976/77 proj.	1974/75	1975/76 1/	1976/77 proj.	1974/75	1975/76 1/	1976/77 proj.	1974/75	1975/76 1/	1976/77
	Million tons									Dol. per ton		
October	1.47	1.70		1.06	1.39		.41	.27		168	126	
November	2.92	3.40		2.06	2.69		.81	.62		141	120	
December	4.35	5.21		3.15	4.14		1.18	1.05		143	125	
January	5.84	6.95		4.13	5.34		1.67	1.59		129	128	
February	7.12	8.57		5.05	6.52		2.04	1.99		117	133	
March	8.55	10.39		6.18	7.91		2.32	2.48		118	128	
April	9.92	12.22		7.11	9.09		2.85	3.13		122	127	
May	11.17	14.11		8.16	10.50		3.07	3.51		119	152	
June	12.42	15.86		9.12	11.86		3.39	3.98		121	188	
July	13.83	17.56		10.29	13.12		3.66	4.37		124	194	
August	15.36			11.44			4.03			134	175	
September	16.70			12.55			4.30			134		
Season Total	16.70	20.65	19.0 ±0.8	12.55	15.50	14.4 ±0.7	4.30	5.1	4.65 ±0.3	131		

1/ Preliminary; season total based on August 1976 indications.
2/ Stocks in total positions.
3/ From processing plants.

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PERTINENT STATISTICS

Planted Acreage

Crop	1974	1975	Indicated 1976[1]
	Million Acres	*Million Acres*	*Million Acres*
Corn	77.8	77.9	84.1
Sorghum	17.7	18.3	18.4
Oats	18.0	17.4	17.6
Barley	9.0	9.5	9.2
Total	122.5	123.1	129.3
Wheat			
Winter	52.4	56.2	57.7
Durum	4.2	4.8	4.7
Other Spring	14.8	14.1	17.8
Total	71.4	75.1	80.2
Soybeans	53.5	54.6	49.0
Upland Cotton	13.6	9.6	11.7
Hay[2]	60.6	61.9	61.2
Total, grand	321.6	324.3	331.4

[1] August 1. [2] Harvested acreage.

Meat, milk and egg production

Period	Fed beef[1]	Pork	Broilers and turkeys	Milk	Eggs
	Million pounds	*Million pounds*	*Million pounds*	*Billion pounds*	*Million pounds*
1972/73					
Oct.-Dec.	4,530	3,507	2,592	27.7	2,212
Jan.-Mar.	4,400	3,262	2,007	28.6	2,186
Apr.-May	2,808	2,183	1,446	21.2	1,495
June-Sept.	5,350	3,786	3,441	38.9	2,842
Total	17,088	12,738	9,486	116.4	8,735
1973/74					
Oct.-Dec.	4,270	3,347	2,680	26.6	2,185
Jan.-Mar.	3,965	3,378	2,173	28.0	2,186
Apr.-May	2,815	2,481	1,611	21.0	1,450
June-Sept.	5,055	4,292	3,572	39.6	2,832
Total	16,105	13,498	10,036	115.2	8,653
1974/75					
Oct.-Dec.	3,685	3,431	2,397	26.9	2,127
Jan.-Mar.	3,698	3,044	1,999	28.1	2,103
Apr.-May	2,301	2,034	1,529	20.9	1,403
June-Sept.	4,453	3,401	3,527	39.1	2,782
Total	14,137	11,910	9,452	115.0	8,415
1975/76					
Oct.-Dec.	3,328	2,835	2,627	27.3	2,129
Jan.-Mar.	4,265	2,895	2,323	29.0	2,128
Apr.-May	2,688	1,882	1,675	21.6	1,411

[1] Estimated from Commercial Slaughter.

Feed grains prospective plantings compared with actual

Crop of—	Prospective		Actual	
	Jan. 1	March 1	July 1 forecast	Jan. 1 following
	Million acres	*Million acres*	*Million acres*	*Million acres*
Corn				
1971	71.0	71.5	74.7	74.1
1972	71.2	68.5	66.8	66.8
1973	71.5	71.6	72.5	71.6
1974	78.8	78.8	77.7	77.7
1975	77.4	75.3	77.5	77.9
1976	80.8	[1] 82.7	[2] 84.1	
Sorghum				
1971	20.2	20.2	20.7	21.3
1972	19.8	18.4	17.4	17.5
1973	19.1	17.5	19.5	19.3
1974	19.6	19.0	17.8	17.7
1975	19.4	18.9	18.2	18.3
1976	18.6	[1] 17.9	[2] 18.4	
Oats				
1971	23.5	23.2	21.9	22.0
1972	21.1	21.0	20.5	20.3
1973	20.5	20.5	19.4	19.2
1974	19.0	18.9	18.3	18.0
1975	17.5	18.2	17.4	17.4
1976	17.1	[1] 16.8	[2] 17.6	
Barley				
1971	11.0	10.9	11.2	11.1
1972	10.1	10.4	10.5	10.6
1973	10.5	11.0	11.4	11.3
1974	9.6	9.5	9.2	9.0
1975	9.8	10.2	9.6	9.5
1976	9.5	[1] 9.2	[2] 9.2	
Total feed grains				
1971	125.8	125.8	128.5	128.5
1972	122.2	118.3	115.2	115.2
1973	121.6	120.6	122.8	121.4
1974	127.0	126.2	123.0	122.6
1975	124.1	122.6	122.7	123.1
1976	126.0	[1] 126.6	[2] 129.3	

[1] April 1. [2] August 1.

PERTINENT STATISTICS

Selected livestock and poultry numbers

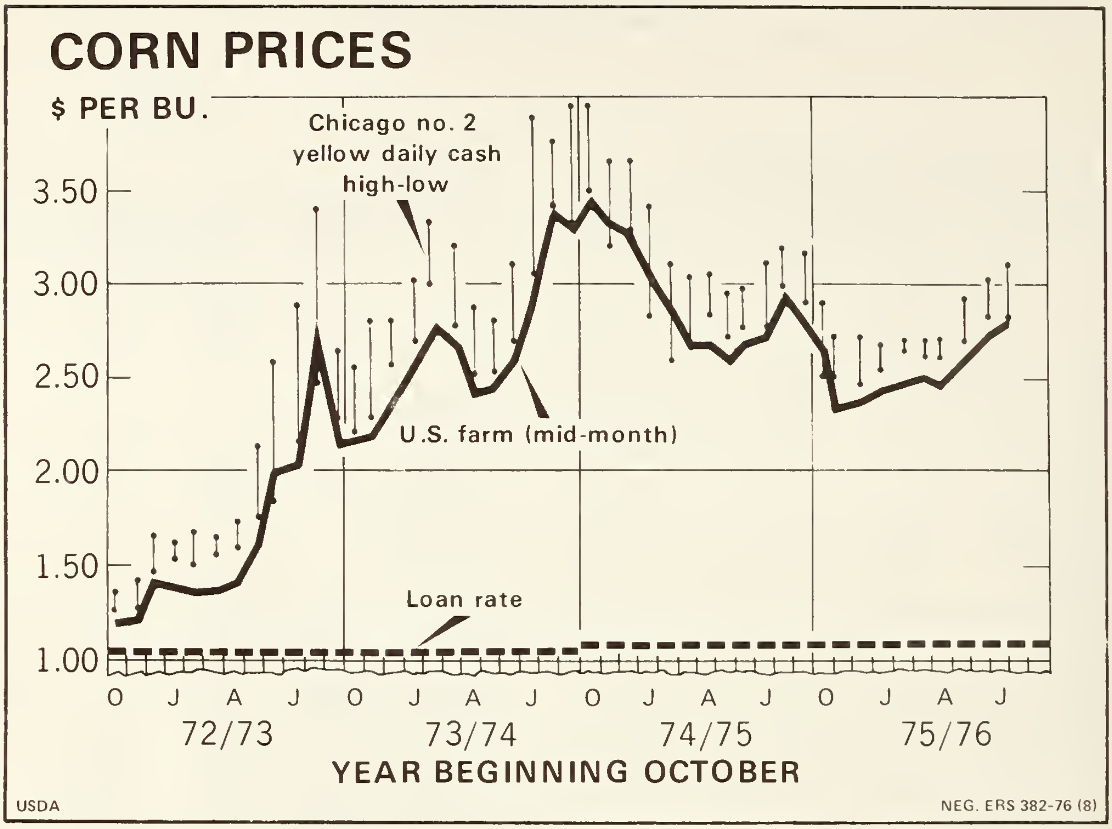
Class	Date	1974	1975	Change
		Million head	*Million head*	*Percent*
Hogs and pigs U.S.	June 1	59.4	48.2	-19
Cattle U.S.	July 1			
On Feed		10.4	9.0	-13
Dairy cows		11.2	11.1	-1
Other		117.4	120.0	+2
Total		139.0	140.1	+1
Hens and pullets[1]	July 1	280	270	-4
Broilers slaughtered[2]	July-Sept.	756	774	+2
Hogs and Pigs (14 States)	Sept. 1	50.2	41.5	-17
Cattle on feed (23 States)	Oct. 1	9.2	9.3	+2
Hens and pullets[1]	Oct. 1	280	276	-1
Broilers slaughtered[2]	Oct.-Dec.	651	721	+11
Hogs and pigs	Dec. 1	55.1	49.6	-10
		1975	1976	Change
		Million head	*Million head*	*Percent*
Cattle U.S.	Jan. 1			
On feed		10.2	12.9	+26
Dairy cows		11.2	11.1	-1
Other cattle		110.4	104.0	-6
Total		131.8	128.0	-3
Hens and pullets[1]	Jan. 1	286	279	-2
Broilers slaughtered[2]	Jan.-Mar.	671	765	+14
Hogs and pigs (14 States)	Mar. 1	40.3	40.9	+1
Cattle on feed (23 States)	Apr. 1	8.5	10.9	+28
Hens and pullets[1]	Apr. 1	278	275	1
Broilers slaughtered	Apr.-June	755	843	+12
Cattle U.S.	July 1			
On feed		9.0	10.5	+17
Dairy cows		11.1	11.1	0
Other		120.0	111.8	-7
Total		140.1	133.4	-5
Hens and pullets	July 1	270	268	-1

[1] Laying age. [2] Under federal inspection.

Feed concentrates consumed by livestock and poultry

	Year beginning October[1]		
	1973	1974	1975[2]
	Million tons	*Million tons*	*Million tons*
Annually:			
Concentrates			
Supply	275.0	225.0	259.2
Fed			
Feed grains	152.2	115.2	130.1
Wheat	1.7	2.8	3.3
Rye	.3	.2	.2
By product feeds	34.0	32.5	36.0
Total, fed	188.2	150.7	169.6
	Million	*Million*	*Million*
Grain-consuming animal units (GCAU's)[3]			
Dairy cattle	12.6	12.5	12.3
Cattle on feed	20.8	15.6	19.8
Other cattle	5.4	5.8	5.5
Hogs	20.0	17.4	17.0
Poultry	18.0	17.3	17.8
Other livestock	1.7	1.7	1.7
Total	78.5	70.3	74.1
	Tons	*Tons*	*Tons*
Concentrates fed per GCAU	2.40	2.14	2.29
Periods:			
Concentrates fed			
Oct.-Dec.	61.7	51.1	51.0
Jan.-Mar.	51.6	42.9	48.7
Apr.-May	27.8	20.7	25.1
June-Sept.	43.5	37.2	
Total, year[4]	188.2	150.7	169.6

[1] Except oat and barley supplies which start June 1. [2] Estimated, August 1976. [3] Livestock and poultry fed during the October-September feeding year weighted by relative consumption of grain and other concentrates; 1 unit is equal to 1 milk cow. [4] Periods may not add due to implied negative wheat feeding in some periods.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$ PER BU.
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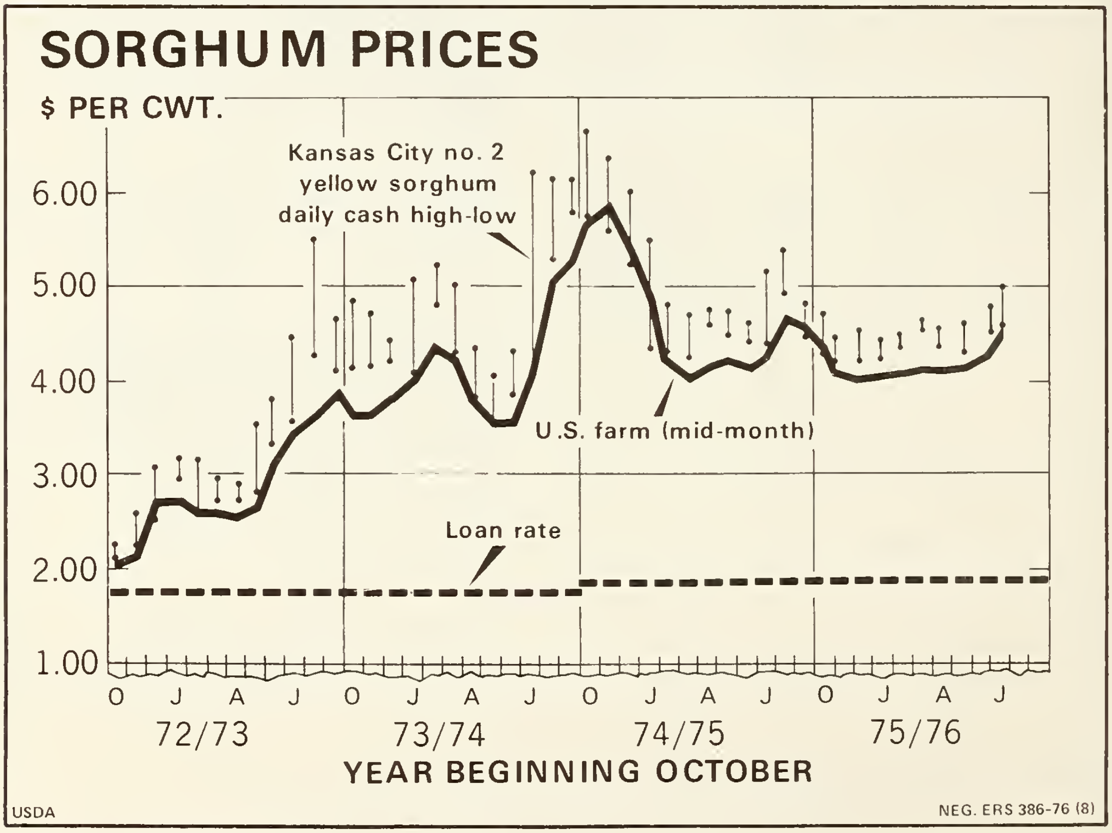
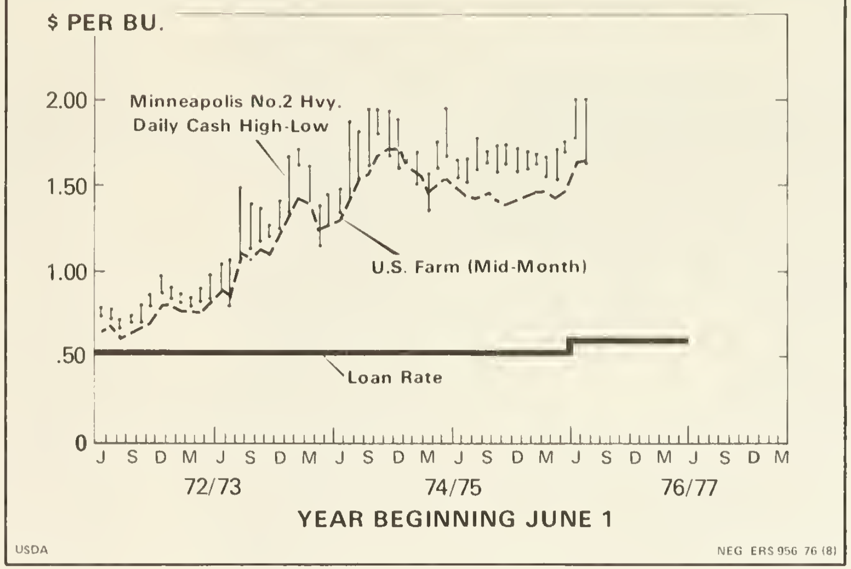
3.00
2.50
2.00
1.50
1.00
Chicago no. 2 yellow daily cash high-low
U.S. farm (mid-month)
Loan rate
O J A J O J A J O J A J O J A J
72/73
73/74
74/75
75/76
YEAR BEGINNING OCTOBER
USDA
NEG. ERS 382-76 (8)


SORGHUM PRICES
$ PER CWT.
6.00
5.00
4.00
3.00
2.00
1.00
Kansas City no. 2 yellow sorghum daily cash high-low
U.S. farm (mid-month)
Loan rate
O J A J O J A J O J A J O J A J
72/73
73/74
74/75
75/76
YEAR BEGINNING OCTOBER
USDA
NEG. ERS 386-76 (8)

OAT PRICES



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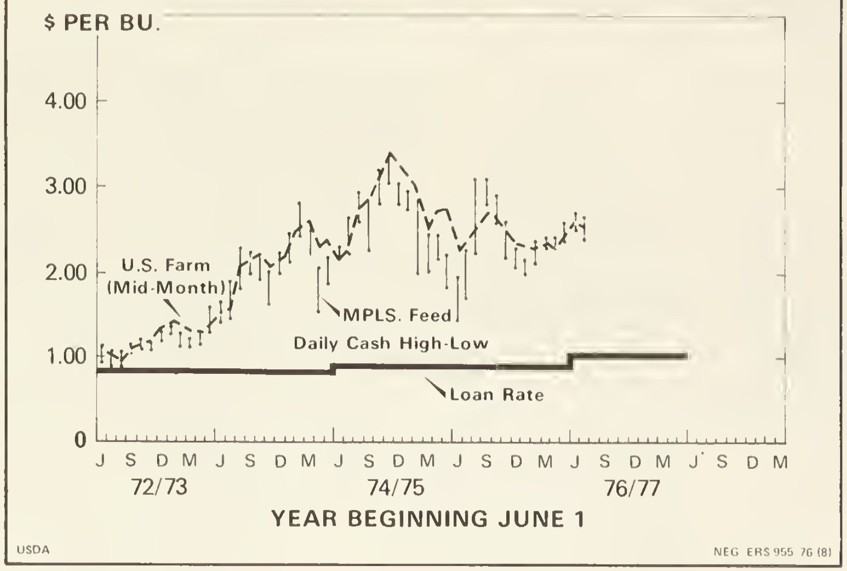

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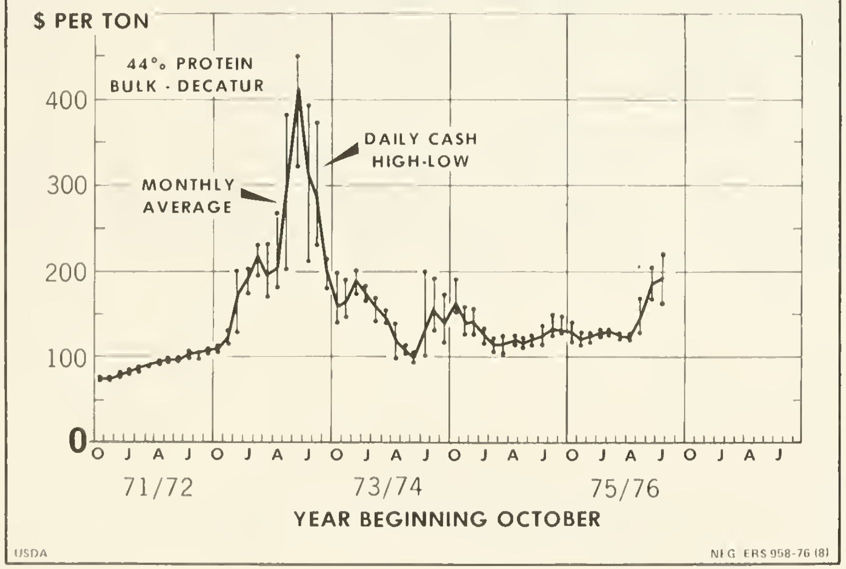

ALFALFA HAY PRICES

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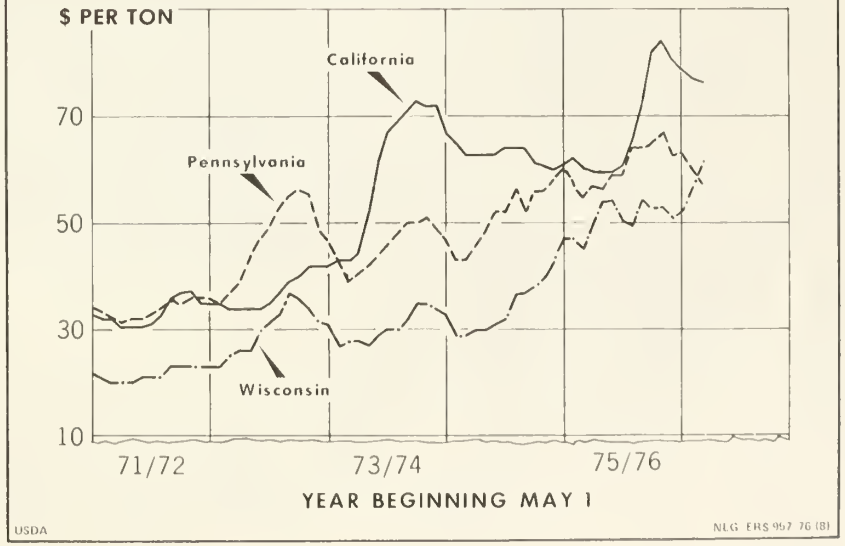

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